December 31, 1997

Mr. Frederick J. Iekel Monroe County Division of Engineering 350 East Henrietta Road Rochester, New York 14620-4643

Dear Mr. Iekel:

This is in response to your recent request for clarification of two items on Paradigm Environmental Services Asbestos Survey of the Iola Campus dated November 19, 1997.

In the conclusion section of the Paradigm Survey Report for each building it should be noted that all asbestos containing materials known to date are included in this report.

As for the assumption contained within the cost estimates; these cost estimates were based on the assumption that each building would be vacated and abated independently. However, it should be noted that if Monroe County elects to abate on a smaller scale the cost in all probability would increase accordingly, based on the scope of work.

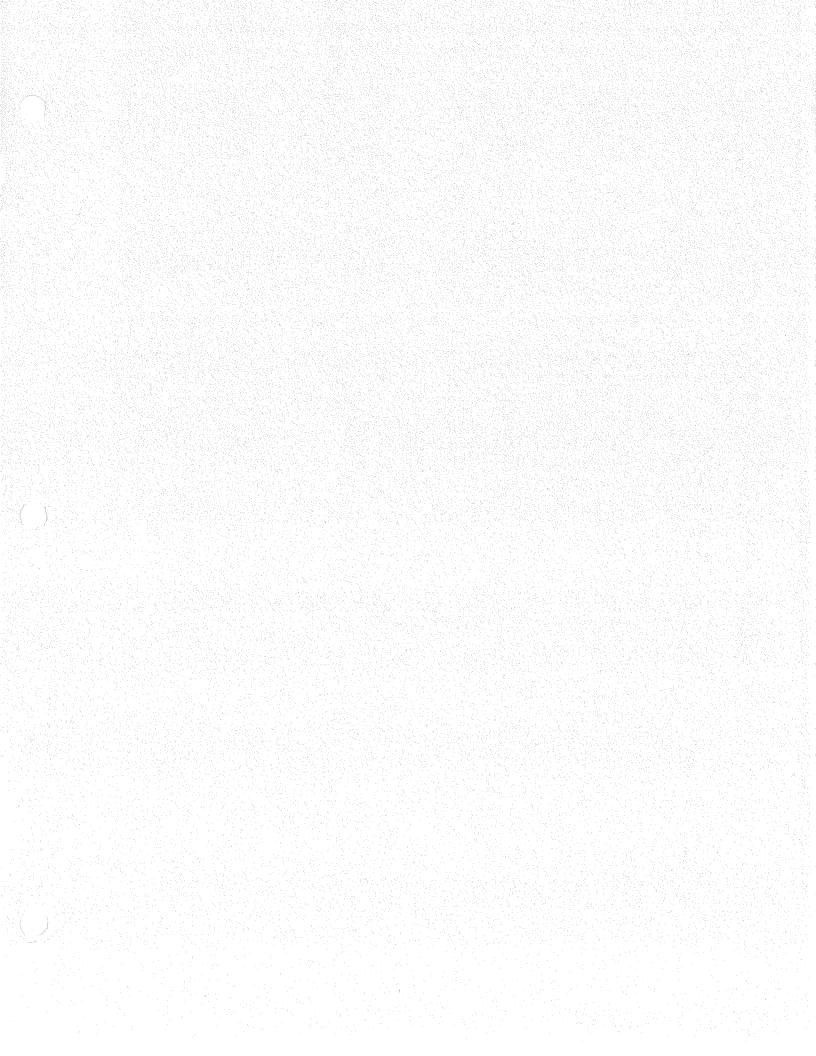
Once a decision is made by Monroe County concerning the abatement projects i.e. size and scope of work, Paradigm Environmental Services, Inc. would be pleased to provide you with cost estimates for asbestos abatement based on the scope of work.

If you should have any further questions or concerns, please feel free to contact me at (716) 647-2530.

Sincerely,

Jøseph Festa

Vice President, Marketing



#### PARADIGM Environmental ervices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client:

**County of Monroe** 

Location:
Job Number:

Iola Complex, Tunnel's, 350 East Henrietta Road, Rochester, New York

Sample Date:

11/24/97

77320

Page Number: 2 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type &	Total Asbestos	T		Matrix Material
				Percentage	Assested	М	Percentage	%
MJP-A.1	84877	Tunnel E	White Fibrous Mud Joint Packing	Chrysotile 32%	32%		None Detected	68%
	-							

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

Date Analyzed:

11/25/97

Microscope: Analyst:

Olympus BH-2 #235757

Mary Dohr

**Laboratory Results Approved By:** 

December 31, 1997

Mr. Frederick J. Iekel Monroe County Division of Engineering 350 East Henrietta Road Rochester, New York 14620-4643

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In the conclusion section of the Paradigm Survey Report for each building it should be noted that all asbestos containing materials known to date are included in this report.

As for the assumption contained within the cost estimates; these cost estimates were based on the assumption that each building would be vacated and abated independently. However, it should be noted that if Monroe County elects to abate on a smaller scale the cost in all probability would increase accordingly, based on the scope of work.

Once a decision is made by Monroe County concerning the abatement projects i.e. size and scope of work, Paradigm Environmental Services, Inc. would be pleased to provide you with cost estimates for asbestos abatement based on the scope of work.

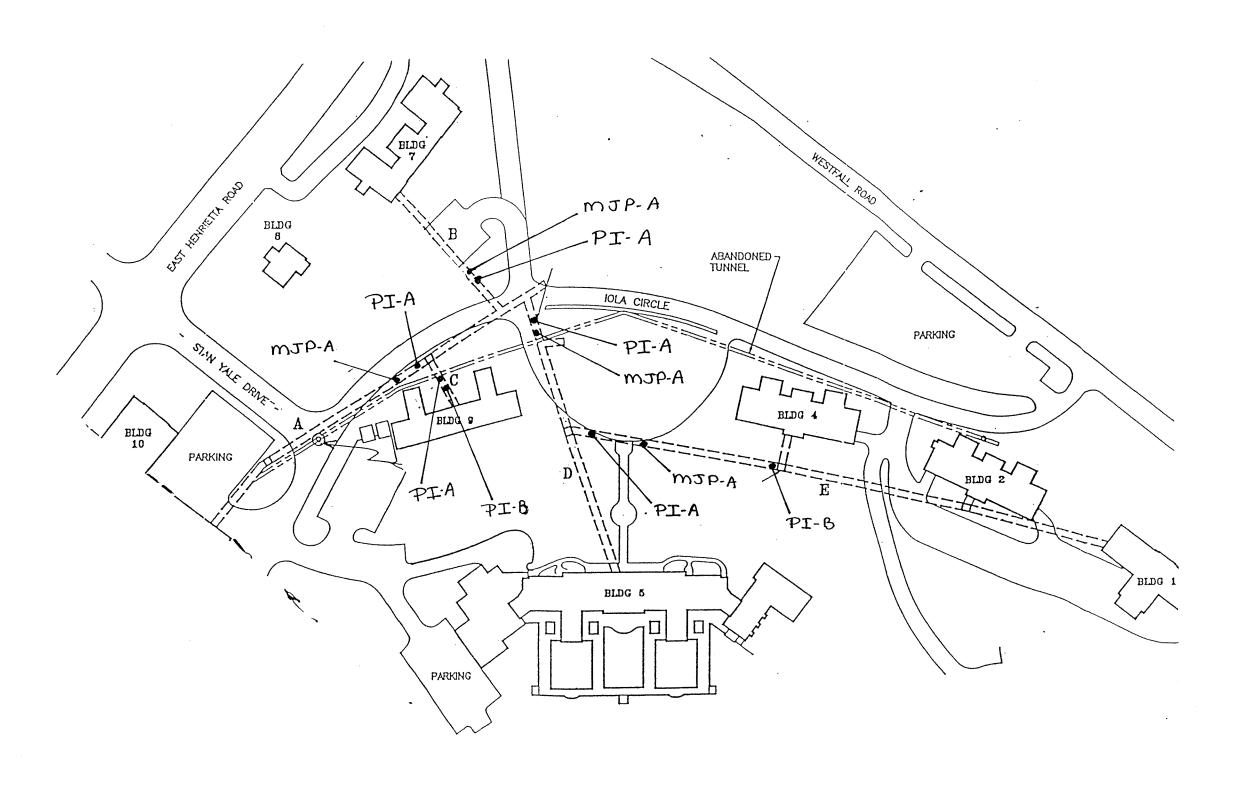
If you should have any further questions or concerns, please feel free to contact me at (716) 647-2530.

Sincerely,

Jøseph Festa

Vice President, Marketing

### SECTION V LABORATORY REPORTS



TUNNELS A, B, C, D, E

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997

# SECTION IV DRAWINGS

#### TUNNELS A, B, C, D, & E

White Pipe Insulation: White/Grey Pipe Insulation: White Mudded Joint Packing:	5,255 80 160	linear feet linear feet linear feet
Total Asbestos Containing Materials in Tunnels A-E:		
Tunnel E White Pipe Insulation White Mudded Joint Packing	1,800 10	linear feet linear feet
Tunnel D White Pipe Insulation White Mudded Joint Packing	980 40	linear feet linear feet
Tunnel C White Pipe Insulation White/Grey Pipe Insulation	350 80	linear feet linear feet
Tunnel B White Pipe Insulation White Mudded Joint Packing	820 30	linear feet linear feet
Tunnel A White Pipe Insulation White Mudded Joint Packing	1,305 80	linear feet linear feet

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

The 1989 Survey disclosed approximately 8,000 linear feet of ACM pipe insulation in the Tunnels. Paradigm has calculated that approximately 5,500 linear feet of ACM pipe insulation is remaining in Tunnels A, B, C, D, & E.

#### Total square/linear footage of asbestos containing materials

Pipe insulation and Mudded Joint Packing:

5,495

linear feet

#### Total cost estimate for asbestos abatement

Pipe Insulation and Mudded Joint Packing:

\$82,500

The following pages summarize the materials that were found to be asbestos containing in Tunnels A, B, C, D, & E of the Iola Campus.

#### IOLA CAMPUS TUNNELS A, B, C, D, & E ROCHESTER, NEW YORK

#### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Tunnels A, B, C, D, & E, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

Paradigm reviewed the **1996 Labeling of Asbestos Insulation and Update of 1989 Asbestos Survey Report** provided by Monroe County and noted the following:

The Paradigm's inspectors concur with the condition of pipe insulation as noted in the May, 1996 labeling and inspection survey: the tunnel pipe insulation remains in good condition, with the exception of exposed pipe ends that were previously noted in need of wet wrap.

Paradigm reviewed the **1995 Condition of Iola Campus Utility Tunnels Report** provided by Monroe County and noted the following:

The report refers to conditions of tunnel structural components only. There are no connotations regarding asbestos containing materials or their condition. Paradigm Environmental Services, Inc. regards the above report inconclusive due to the lack of reference to asbestos containing materials data.

Paradigm reviewed the **1989 Survey of the County Building Report** provided by Monroe County and noted the following:

# SECTION III CONCLUSIONS

#### IOLA CAMPUS TUNNELS A, B, C, D, & E ROCHESTER, NEW YORK

#### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Tunnels A, B, C, D, & E, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations.

### SECTION II LIMITATIONS

#### **IOLA CAMPUS** TUNNELS A, B, C, D, & E ROCHESTER, NEW YORK

#### INTRODUCTION

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Tunnels A, B, C, D, & E, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Tunnels A, B, C, D, & E, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples -New York State Department of Health, ELAP Method

198.1 ("Polarized Light Microscopy Methods for identifying and quantitating asbestos in bulk samples").

### SECTION I INTRODUCTION

#### IOLA CAMPUS TUNNELS A, B, C, D, & E ROCHESTER, NEW YORK

#### **TABLE OF CONTENTS**

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**SECTION II** 

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SECTIONIII

- CONCLUSIONS

SECTIONIV

- DRAWINGS

SECTIONV

- LABORATORY REPORTS

TUNNELS A, B, C, D, & E

#### **PARADIGM**

Environmental Services, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

#### T.E.M. Results

Client: Location: **County of Monroe** 

Iola Complex, Building 10, 350 East Henrietta Road, Rochester, New York

Job No: 77381 Sample Date: 11/25/97

Page Number: 1 of 1

				TEM A	nalysis
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type
CTM-A.1	85380	Third Floor, Conference Room	Brown Ceiling Tile Mastic from Sample 85379	<1.0%	None Detected
FT-A.1	85384	Northeast Stair Tower	Grey 12" x 12" Floor Tile	<1.0%	None Detected
FTM-A.1	85385	Northeast Stair Tower	Black Fibrous Floor Tile Mastic from Sample 85384	<1.0%	None Detected
CMF-A.1	85386	First Floor, Break Room	Yellow Carpet Mastic on Floor	<1.0%	None Detected
SV-A.1	85387	First Floor, Room 301	Brown Sheet Vinyl	<1.0%	None Detected
SVM-A.1	85388	First Floor, Room 301	Tan Sheet Vinyl Mastic from Sample 85387	<1.0%	None Detected
SV-B.1	85389	First Floor, Room 306	Tan Flower Pattern Fibrous Sheet Vinyl	<1.0%	None Detected
SVM-B.1	85390	First Floor, Room 306	Black Sheet Vinyl Mastic from Sample 85389	<1.0%	None Detected
CMM-A.1	85026	First Floor, Men's Rest Room	Tan Cove Molding Mastic	<1.0%	None Detected

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

**Laboratory Results Approved By:** 

File ID: IolaB10,XLS

#### **PARADIGM**

#### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

rvices	, Inc.						WHOLD	5 S
Client:	County of	Monroe				<u> </u>	INCINSIDERON	4110 1N
Location:	Iola Comple	ex, Building 10, 350 E	East Henrietta Road, R	ochester, New Yo	rko 🍱	N	Sample Date:	12/2/97
Job Number:	77578	LAYERS	IN ONE SAMPLE	ONELAY	6nm	ľ	Page Number:	1 of 1
Client ID	Lab ID	Sampling Location	East Henrietta Road, R	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
Roof-A.1a	87874	Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 38%	62%
Roof-A.1b	87875	Roof	Black Fibrous Roofing Felts	Chrysotile 14%	14%		Cellulose 39%	47%
Roof-A.1c	87876	Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 52%	48%
Roof-A.1d	87877	Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 43%	57%
Roof-A.1e	87878	Roof	Brown Fibrous Roofing Insulation	None Detected	0%		Cellulose 92%	8%
							Managan and the second and the secon	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/4/97

Microscope:

Olympus BH-2 #235757

^ ¬alyst:

Mary Dohr

**Laboratory Results Approved By:** 

File ID: IolaB10.XLS

#### PARADIGM Environmental

Job Number:

## Environmental rvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 10, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/25/97

77341 Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Fibers Type & Percentage	Matrix Material %
CMM-A.1	85026	First Floor, Men's Rest Room	Tan Cove Molding Mastic	None Detected	0%	*	None Detected	100%
:								
***************************************								
	,							

ELAP ID No.: 10958

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Date Analyzed:

11/25/97

Microscope:

Olympus BH-2 #235757

^ alyst:

Patrick Fitzgerald

Laboratory Results Approved By:

File ID: lolaB10.XLS

#### PARADIGM Environmental

## Environmental rvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client:

Job Number:

**County of Monroe** 

Location:

Iola Complex, Building 10, 350 East Henrietta Road, Rochester, New York

Sample Date:

11/25/97

77381

Page Number: 2 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos	Total	T	Non-Asbestos	Matrix
	Lub ID	Cumping Ecoution	200011541011	Fibers Type &	Asbestos	E	Fibers Type &	Material
				Percentage		м	Percentage	%
				<b>-</b>			<b></b>	
CMF-A.1	85386	First Floor,	Yellow Carpet Mastic on	None Detected	0%	*	None Detected	100%
		Break Room	Floor		l			
	05007	T	D 0111/	News Detected	00/	Н	Maria Bata da d	100%
SV-A.1	85387	Third Floor, Room 301	Brown Sheet Vinyl	None Detected	0%	*	None Detected	100%
SVM-A.1	85388	Third Floor, Room 301	Tan Sheet Vinyl Mastic	None Detected	0%	*	Cellulose 8%	92%
OVIII A			from Sample 85387					
			'					
,						Ш		
SV-B.1	85389	Third Floor, Room 306	Tan Flower Pattern Fibrous	None Detected	0%	*	Cellulose 38%	62%
			Sheet Vinyl					
SVM-B.1	85390	Third Floor, Room 306	Black Sheet Vinyl Mastic	None Detected	0%	*	Cellulose 6%	94%
3 V IVI-D. I	00000	Trilla ricor, receir coc	from Sample 85389	Trone Detected	0,0		Octidio30 070	0470
			lioni campie cocco					
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ELAP ID No.: 10958

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Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

11/28/97

Microscope:

Olympus BH-2 #235757

^ ¬alyst:

Patrick Fitzgerald

Laboratory Results Approved By:

File ID: lolaB10.XLS

#### PARADIGM Environmental ervices, Inc.

Job Number:

#### 179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 10, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/25/97

77304

Page Number: 1 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
PI-A.1	85376	First Floor, Break Room	White Fibrous Pipe Insulation	Chrysotile 5%	5%		None Detected	43%
PI-B.1	85377	First Floor, Break Room	Yellow Fibrous Pipe Insulation	None Detected	0%		Mineral Wool 100%	0%
SCT-A.1	85378	First Floor, Break Room	White Fibrous 2' x 4" Suspended Ceiling Tile	None Detected	0%		Cellulose 60% Mineral Wool 20%	20%
ACT-A.1	85379	Third Floor, Conference Room	White Fibrous 2' x 4" Adhered Ceiling Tile	None Detected	0%		Cellulose 53% Mineral Wool 21%	26%
CTM-A.1	85380	Third Floor, Conference Room	Brown Ceiling Tile Mastic from Sample 85379	None Detected	0%	*	Cellulose 4%	96%
P-A.1	85381	First Floor, Men's Restroom	White/Grey Fibrous Plaster	None Detected	0%		Wood Fiber 22%	78%
WS-A.1	85382	First Floor, Men's Locker Room	White Fibrous Wall System, Drywall, & Spackle	None Detected	0%		Cellulose 14%	86%
WG-A.1	85383	Third Floor, Conference Room	White Window Glaze	None Detected	0%		None Detectëd	100%
FT-A.1	85384	Northeast Stairtower	Grey 12" x 12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-A.1	85385	Northeast Stairtower	Black Fibrous Floor Tile Mastic <b>from Sample 85384</b>	None Detected	0%	*	Cellulose 10%	90%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 11/28/97

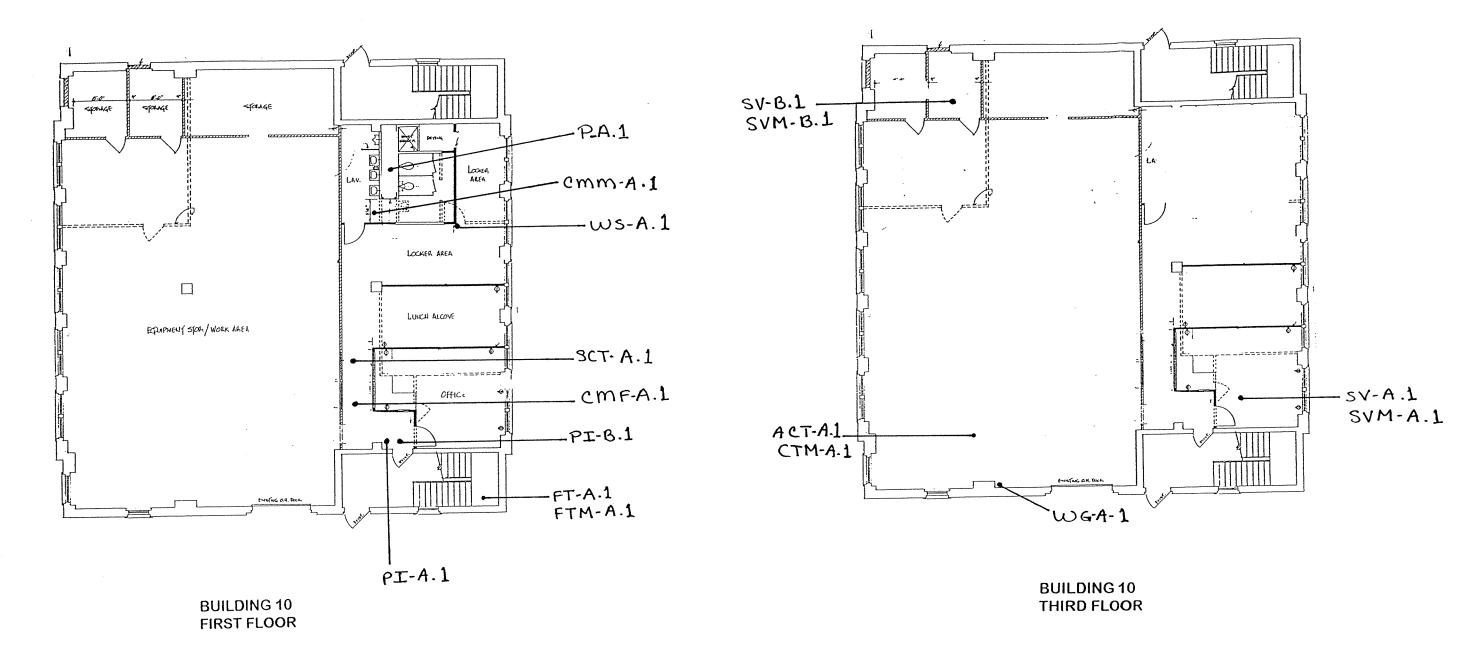
Microscope: Olympus BH-2 #232953

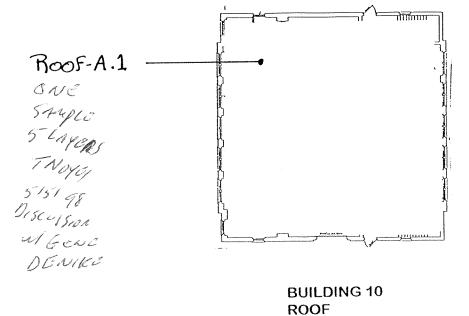
Analyst: Patrick Fitzgerald

Laboratory Results Approved By:

File ID: lolaB10.XLS

### SECTION V LABORATORY REPORTS





BUILDING 10 DOT

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997

### SECTION IV DRAWINGS

#### 1STFLOOR

Break Room White Pipe Insulation	80	linear feet				
Equipment Storage/Work Area White Pipe Insulation	135	linear feet				
Locker Room White Pipe Insulation	50	linear feet				
Rest Room White Pipe Insulation	60	linear feet				
Storage Room #1 White Pipe Insulation	60	linear feet				
Storage Room #2 White Pipe Insulation	40	linear feet				
Storage/Office White Pipe Insulation	40	linear feet				
Total Asbestos Containing Materials on the 1st Floor:						
White Pipe Insulation:	465	linear feet				
ROOF						
Roof Black Roofing Felts	1,120	square feet				
Total Asbestos Containing Materials on the Roof:						
Black Roofing Felts:	1,120	square feet				

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM per the 1997 survey:

**Roofing Materials** 

#### Total square/linear footage of asbestos containing materials

Pipe Insulation: 465 linear feet

Roofing Felts: 1,120 square feet

#### Total cost estimate for asbestos abatement

Pipe Insulation: \$7,000

Roofing Felts: \$4,500

The following pages summarize the materials that were found to be asbestos containing in Building 10.

\$ .

# IOLA CAMPUS BUILDING 10 DOT - HIGHWAY ROCHESTER, NEW YORK

#### CONCLUSIONS

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 10, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified as ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified as ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

Paradigm inspectors noted asbestos containing pipe insulation located in the attic to be in poor condition.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey Report refers to the Steam Tunnels, Power House, and Building 5 only.

Paradigm cannot compare the 1996 Asbestos Survey to this survey due to the fact that Building 10 was not included in the 1996 report.

Paradigm reviewed the 1989 Survey of the County Buildings Report provided by Monroe County and noted the following:

The 1989 Survey of the County Buildings Report was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 10. The 1989 survey included sampling and analysis of pipe insulation and ceiling tiles only. This survey includes sampling and analysis of additional possible asbestos containing material types.

# SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 10 DOT - HIGHWAY ROCHESTER, NEW YORK

#### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Building 10, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations.

### SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 10 DOT - HIGHWAY ROCHESTER, NEW YORK

#### **INTRODUCTION**

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 10, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 10, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method 198.1 ("Polarized Light Microscopy Methods for identifying and quantitating asbestos in bulk samples").

# SECTION I INTRODUCTION

# IOLA CAMPUS BUILDING 10 DOT - HIGHWAY ROCHESTER, NEW YORK

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SECTION I - INTRODUCTION

SECTION II - LIMITATIONS

SECTION III - CONCLUSIONS

SECTION IV - DRAWINGS

SECTION V - LABORATORY REPORTS

### BUILDING #10 DEPARTMENT OF TRANSPORTATION - HIGHWAY

#### **PARADIGM**

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Services, Inc.

Location:

#### T.E.M. Results

Client: County of Monroe

Iola Complex, Building 9, 350 East Henrietta Road, Rochester, New York

Job No: 77401 Sample Date: 11/26/97

Page Number: 1 of 1

				TEM Analysis	
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type
CMM-A.1	85498	First Floor, Center Wing	Brown Cove Molding Mastic	<1.0%	Trace Chrysotile
FT-A.1	85499	First Floor, Center Wing	Cream 12"x12" Floor Tile	33%	Chrysotile
FTM-A.1	85500	First Floor, Center Wing	Black Fibrous Floor Tile Mastic from Sample 85499	2.5%	Chrysotile
WC-A.1	85505	Exterior Windows	White Window Caulk	<1.0%	None Detected

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

Laboratory Results Approved By:

File ID: lolab9.xls

### **PARADIGM**

## Environmental

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client: County of Monroe

Location: Iola Complex, Building 9, 350 East Henrietta Road, Rochester, New York

Sample Date: 12/2/97

Job Number: 77578 Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
Roof-A.1a	87871	Roof	Black Fibrous Roofing Felts	Chrysotile 7%	7%		Cellulose 43%	50%
Roof-A.1b	87872	Roof	Black with Grey Stones Fibrous Roofing Felts	None Detected	0%	*	Cellulose 36%	64%
Roof-A.1c	87873	Roof	Black with White Stones Fibrous Roofing Felts	Chrysotile 3%	3%		Cellulose 43%	54%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 12/4/97

Microscope: Olympus BH-2 #235757

alyst: Mary Dohr

Laboratory Results Approved By:

### **PARADIGM**

### E<u>nvironmental</u>

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client:

**County of Monroe** 

Location:

Iola Complex, Building 9, 350 East Henrietta Road, Rochester, New York

Sample Date:

11/26/97

Job Number: 7740

old Complex, Building 5, 500 East Hornotta Road, Roonester, New York

Page Number:

1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
PI-A.1	85497	First Floor, Center Wing	Grey Fibrous Pipe Insulation	Chrysotile 44%	44%		Cellulose 21%	35%
CMM-A.1	85498	First Floor, Center Wing	Brown Cove Molding Mastic	None Detected	0%	*	None Detected	100%
FT-A.1	85499	First Floor, Center Wing	Cream 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-A.1	85500	First Floor, Center Wing	Black Fibrous Floor Tile Mastic from <b>Sample 85499</b>	None Detected	0%	*	Cellulose 12%	88%
SCT-A.1	85501	First Floor, Center Wing	White Fibrous 2'x4' Suspended Ceilling Tile	None Detected	0%		Cellulose 44% Mineral Wool 15%	41%
NS-A.1	85502	First Floor, South Wing Bathroom	White Fibrous Wall System Drywall, Spackle & Tape	None Detected	0%		Cellulose 15%	85%
P-A.1	85503	First Floor, North Wing	Grey Plaster Top Coat	None Detected	0%		None Detected	100%
P-B.1	85504	First Floor, North Wing	Grey Plaster Bottom Coat	None Detected	0%		Cellulose 5%	95%
WC-A.1	85505	Exterior Windows	White Window Caulk	None Detected	0%	*	None Detected	100%
							ELADID No. : 40050	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

11/26/97

Microscope:

Olympus BH-2 #235757

ાlyst:

Patrick Fitzgerald

Laboratory Results Approved By:

## SECTION V LABORATORY REPORTS

# SECTION IV DRAWINGS

### **ROOF**

Roof

Black Roofing Felts

1,325

square feet

**Total Asbestos Containing Materials on the Roof:** 

**Black Roofing Felts:** 

1,325

square feet

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

### **BASEMENT**

Basement Cream 12" x 12" Floor Tile & Mastic Grey Pipe Insulation	10 2	square feet linear feet
Total Asbestos Containing Materials in the Basement:		
Cream 12" x 12" Floor Tile & Mastic Grey Pipe Insulation	10 2	square feet linear feet
1ST FLOOR		
Center Wing Cream 12" x 12" Floor Tile & Mastic Grey Pipe Insulation	715 10	square feet linear feet
South Wing Cream 12" x 12" Floor Tile & Mastic	45	square feet
Total Asbestos Containing Materials on the 1st Floor:		
Cream 12" x 12" Floor Tile & Mastic:	760	square feet
Grey Pipe Insulation:	10	linear feet
ATTIC		
Attic Grey Pipe Insulation	250	linear feet
Total Asbestos Containing Materials in the Attic:		
Grey Pipe Insulation:	250	linear feet

Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM per the 1997 survey:

Floor Tile and Mastic Roofing Materials

### Total square/linear footage of asbestos containing materials

Pipe Insulation:	262	linear feet
Floor Tile and Mastic:	770	square feet
Roofing Materials:	1,325	square feet

### Total cost estimate for asbestos abatement

Pipe Insulation:	\$4,000
Floor Tile and Mastic:	\$1,800
Roofing Materials:	\$5,300

The following pages summarize the materials that were found to be asbestos containing in Building 9.

# IOLA CAMPUS BUILDING 9 M & C ROCHESTER, NEW YORK

### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 9, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified as ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified as ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

Paradigm inspectors noted asbestos containing pipe insulation located in the attic to be in poor condition.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey Report refers to the Steam Tunnels, Power House, and Building 5 only.

Paradigm cannot compare the 1996 Asbestos Survey to this survey due to the fact that Building 9 was not included in the 1996 report.

Paradigm reviewed the 1989 Survey of the County Buildings Report provided by Monroe County and noted the following:

The 1989 Survey of the County Buildings Report was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 9. The 1989 survey included sampling and analysis of pipe insulation and ceiling tiles only. This survey includes sampling and analysis of additional possible asbestos containing material types.

# SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 9 M & C ROCHESTER, NEW YORK

#### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Building 9, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations.

## SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 9 M & C ROCHESTER, NEW YORK

#### INTRODUCTION

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 9, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 9, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method 198.1 ("Polarized Light Microscopy Methods for identifying and quantitating asbestos in bulk samples").

# SECTION I INTRODUCTION

# IOLA CAMPUS BUILDING 9 M & C ROCHESTER, NEW YORK

### **TABLE OF CONTENTS**

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- LIMITATIONS

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SECTION IV

- DRAWINGS

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- LABORATORY REPORTS

## BUILDING #9 M & C

### PARADIGM Facilitation

Environmental

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Services, Inc.

### T.E.M. Results

Client: Location: **County of Monroe** 

lola Complex, Building 8, 350 East Henrietta Road, Rochester, New York

Job No: 77343 Sample Date: 11/25/97

Page Number: 1 of 1

				rage Humber.	
				TEM A	nalysis
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type
FT-A.1	85030	First Floor, North Area Open Space	White 12"x12" Floor Tile	<1.0%	None Detected
FTM-A.1	85031	First Floor, North Area Open Space	Yellow Floor Tile Mastic from Sample 85030	<1.0%	None Detected
FT-B.1	85032	East Entrance Way	Cream 12"x12" Floor Tile	<1.0%	None Detected
FTM-B.1	85033	East Entrance Way	Grey Floor Tile Mastic from Sample 85032	<1.0%	None Detected
SV-A.1	85036	East Entrance Way	Red/Black Fibrous Sheet Vinyl	<1.0%	None Detected
CMM-A.1	85040	First Floor, North Area Open Space	Yellow Cove Molding Mastic	<1.0%	None Detected
WC-A.1	85495	On All Exterior Windows	Yellow Window Caulk	<1.0%	None Detected
Roof-A.1a	87869	Roof	Black Fibrous Roofing Felt	<1.0%	None Detected
	. <u> </u>				

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

**Laboratory Results Approved By:** 

### **PARADIGM**

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client:

**County of Monroe** 

Location:

Iola Complex, Building 8, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/2/97

Job Number: 77578

Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
Roof-A.1a	87869	Roof	Black Fibrous Roofing Felt	None Detected	0%	*	Cellulose 43% Mineral Wool 6%	51%
Roof-A.1b	87870	Roof	Grey Slate	None Detected	0%		None Detected	100%
	,							

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/4/97

Microscope:

Olympus BH-2 #235757

alyst:

Mary Dohr

Laboratory Results Approved By:

## **PARADIGM**Environmenta

## Environmental ervices, Inc.

Job Number:

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 8, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/26/97

1 of 1

398 Page Number:

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Fibers Type & Percentage	Matrix Material %
ST-A.1	85494	Second Floor, Exterior Wall of Porch	Grey Stucco	None Detected	0%		None Detected	100%
WC-A.1	85495	On All Exterior Windows	Yellow Window Caulk	None Detected	0%	*	None Detected	100%
<i>!</i>								

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 11/26/97

Microscope: Olympus BH-2 #235757

alyst: Patrick Fitzgerald

Laboratory Results Approved By:

### **PARADIGM**

## Environmental ervices, Inc.

Job Number:

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 8, 350 East Henrietta Road, Rochester, New York

**Sample Date:** 11/25/97

Page Number: 2 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
				rercertage		IAI		
CMM-A.1	85040	First Floor, North Area Open Space	Yellow Cove Molding Mastic	None Detected	0%	*	None Detected	100%
CV-A.1	85041	Second Floor, Porch Floor	Brown Fibrous Canvas Covering	None Detected	0%		Cellulose 88%	12%
WS-A.1	85042	Second Floor, Bathroom	White Fibrous Wall System, Drywall and Spackle	None Detected	0%		Cellulose 15%	85%
				A CANADA CONTRACTOR AND A CANA				
1								,
								·
THE STATE OF THE S								

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine

if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 11/25/97

Microscope: Olympus BH-2 #235757
alyst: Patrick Fitzgerald

**Laboratory Results Approved By:** 

## PARADIGM

## Environmental ervices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 8, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/25/97

Job Number: 77343 Page Number: 1 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
FT-A.1	85030	First Floor, North Area Open Space	White 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-A.1	85031	First Floor, North Area Open Space	Yellow Floor Tile Mastic from Sample 85030	None Detected	0%	*	Cellulose 5%	95%
FT-B.1	85032	East Entrance Way	Cream 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-B.1	85033	East Entrance Way	Grey Floor Tile Mastic from Sample 85032	None Detected	0%	*	Cellulose 6%	94%
P-A.1	85034	Second Floor, Southwest Office	White Plaster	None Detected	0%		Cellulose 8%	92%
PI-A.1	85035	Basement	White Fibrous Pipe Insulation	Chrysotile 57%	57%		None Detected	43%
SV-A.1	85036	East Entrance Way	Red/Black Fibrous Sheet Vinyl	None Detected	0%	*	Cellulose 34%	66%
SF-A.1	85037	First Floor, Kitchen	Brown Fibrous Sub Floor	None Detected	0%		Cellulose 70% Mineral Wool 18%	12%
WB-A.1	85038	Basement	Brown Fibrous Wall Board	None Detected	0%		Cellulose 95%	5%
WG-A.1	85039	Second Floor, Southwest Office	White Fibrous Window Glaze	Chrysotile 8%	8%		Cellulose 3%	89%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine

if this material can be considered or treated as non-asbestos containing.

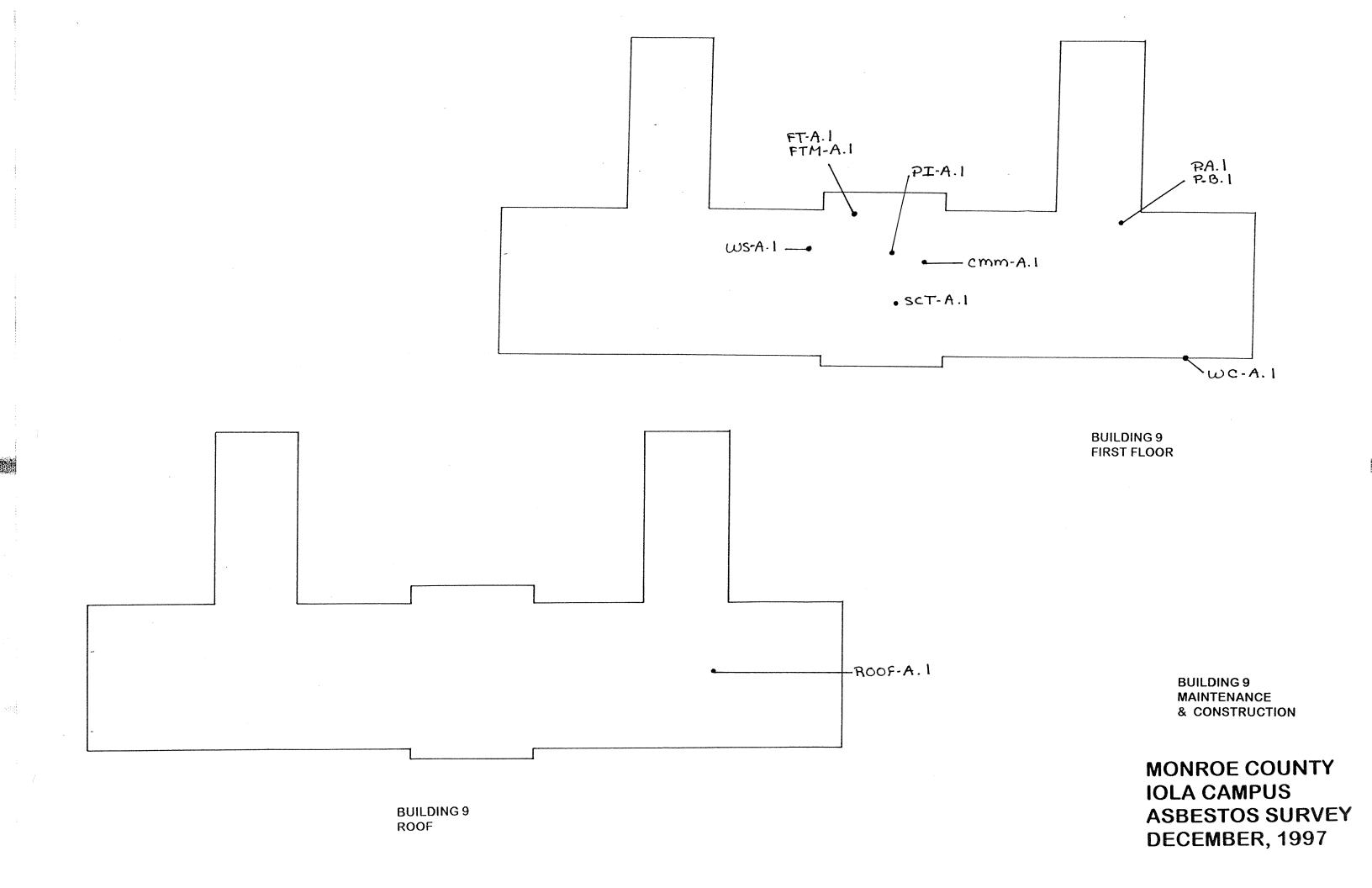
Date Analyzed: 11/25/97

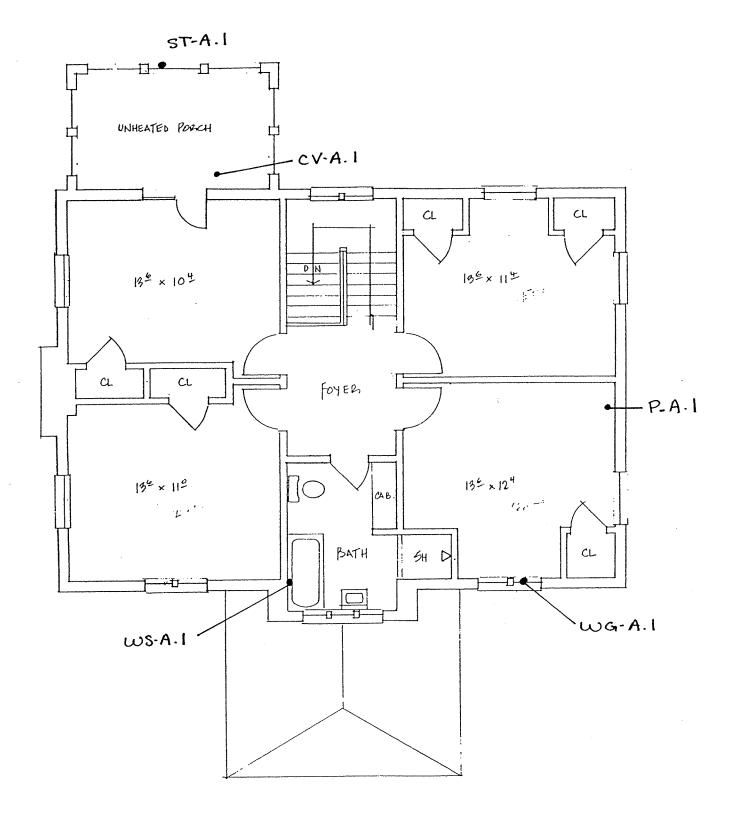
Microscope: Olympus BH-2 #235757

alyst: Patrick Fitzgerald

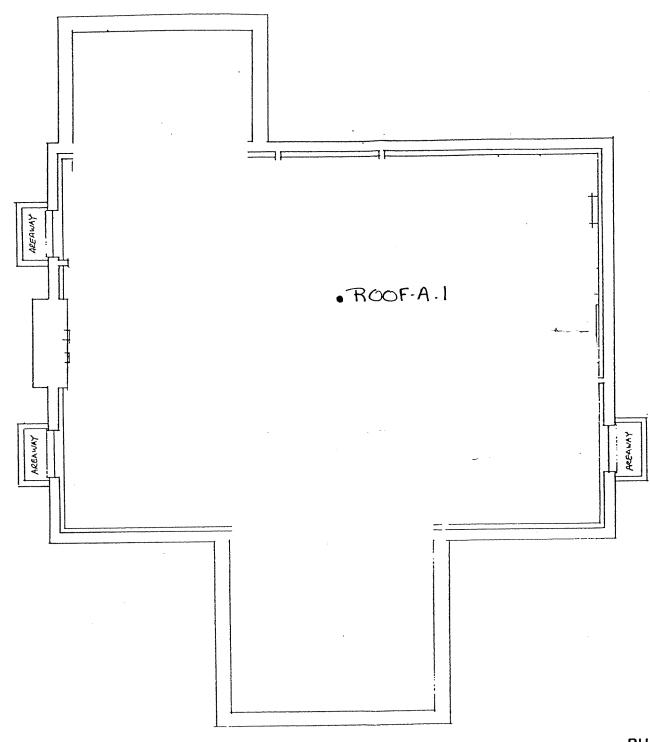
Laboratory Results Approved By:

## SECTION V LABORATORY REPORTS





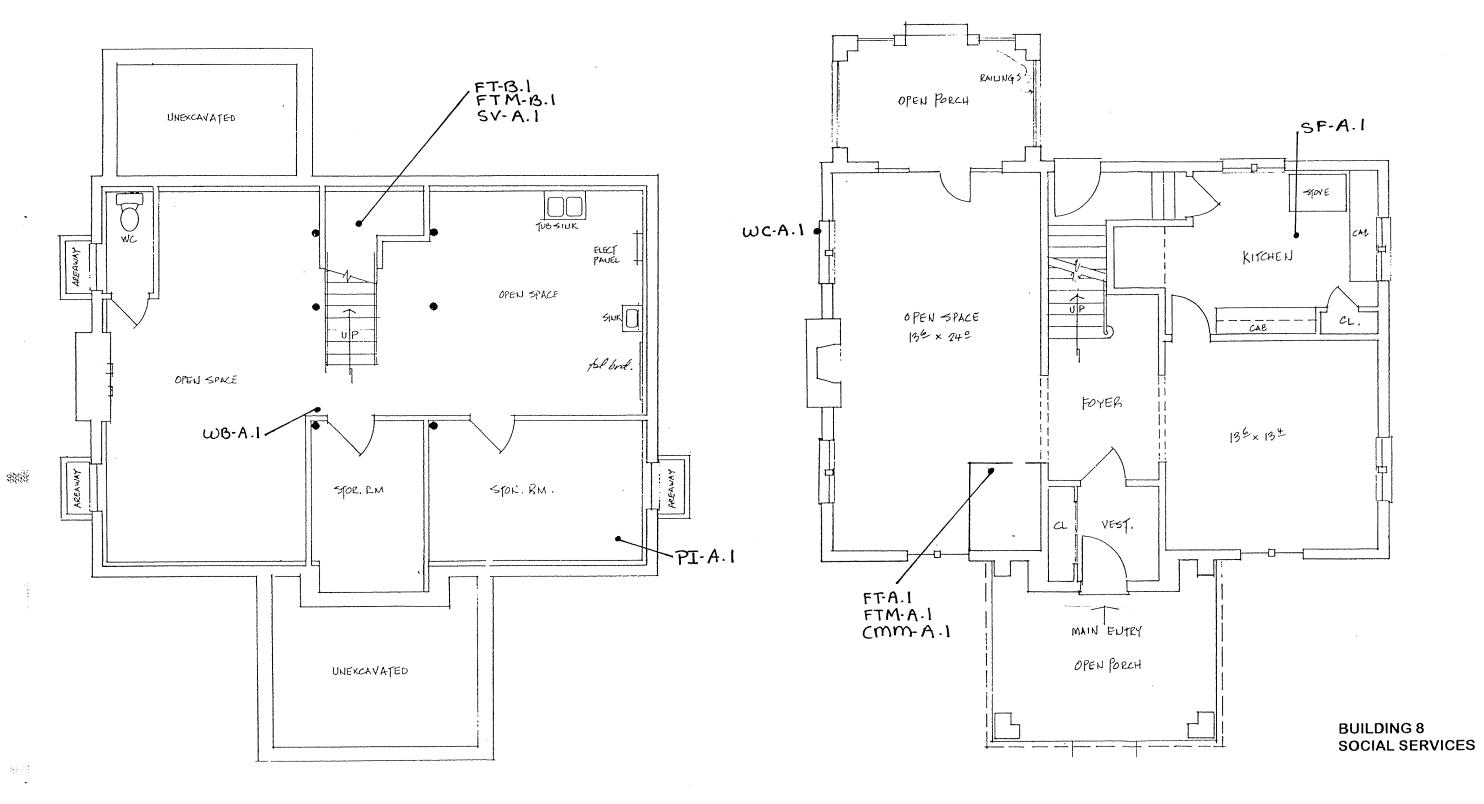
BUILDING 8 SECOND FLOOR



BUILDING 8 SOCIAL SERVICES

BUILDING 8 ROOF

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997



BUILDING 8 BASEMENT

BUILDING 8 FIRST FLOOR

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997

## SECTION IV DRAWINGS

### **BUILDING EXTERIOR**

<b>Exterior</b>		
Yellow W	/indow	Caulk

200

linear feet

**Total Asbestos Containing Materials on the Building Exterior:** 

Yellow Window Caulk:

200

linear feet

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

### **BASEMENT**

Basement White Pipe Insulation	260	linear feet						
Total Asbestos Containing Materials in the Basement:								
White Pipe Insulation	260	linear feet						
1ST FLOOR								
North Room - Open Space White Window Glaze	100	linear feet						
Southwest Office White Window Glaze	30	linear feet						
Total Asbestos Containing Materials on the 1stFloor:								
White Window Glaze:	130	linear feet						
2ND FLOOR								
<u>Foyer</u> White Window Glaze	20	linear feet						
Northwest Office White Window Glaze	50	linear feet						
Northeast Office White Window Glaze	50	linear feet						
Southwest Office White Window Glaze	50	linear feet						
Southeast Office White Window Glaze	50	linear feet						
Total Asbestos Containing Materials on the 2nd Floor:								
White Window Glaze:	220	linear feet						

### Total square/linearfootage of asbestos containing materials

Pipe Insulation: 260 linear feet

Window Glaze: 350 linear feet

Window Caulk: 200 linear feet

### Total cost estimate for asbestos abatement

Pipe Insulation: \$3,900

Window Glaze/Window Caulk: \$1,700

The following pages summarize the materials that were found to be asbestos containing in Building 8.

# IOLA CAMPUS BUILDING 8 SOCIAL SERVICES ROCHESTER, NEW YORK

### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 8, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified as ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey Report refers to the Steam Tunnels, Power House, and Building 5 only.

Paradigm cannot compare the 1996 Asbestos Survey to this survey due to the fact that Building 8 was not included in the 1996 report.

Paradigm reviewed the 1989 Survey of the County Buildings Report provided by Monroe County and noted the following:

The 1989 Survey of the County Buildings Report was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 8. The 1989 survey included sampling and analysis of pipe insulation and ceiling tiles only. This survey includes sampling and analysis of additional possible asbestos containing material types. Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM per the 1997 survey:

Window Glaze Window Caulk

# SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 8 SOCIAL SERVICES ROCHESTER, NEW YORK

#### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Building 8, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations.

## SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 8 SOCIAL SERVICES ROCHESTER, NEW YORK

### **INTRODUCTION**

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 8, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 8, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

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The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method 198.1 ("Polarized Light Microscopy Methods for identifying and quantitating asbestos in bulk samples").

# SECTION I INTRODUCTION

# IOLA CAMPUS BUILDING 8 SOCIAL SERVICES ROCHESTER, NEW YORK

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- CONCLUSIONS

**SECTION IV** 

- DRAWINGS

SECTION V

- LABORATORY REPORTS

## BUILDING #8 SOCIAL SERVICES

Environmental Services, Inc.

Location:

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

### T.E.M. Results

Client: County of Monroe

Iola Complex, Building 7, 350 East Henrietta Road, Rochester, New York

Job No: 77332 Sample Date: 11/25/97 Page Number: 1 of 1

				TEM A	nalysis
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type
CMF-A.1	84958	Second Floor, Room 210	Yellow/Black Carpet Mastic	<1.0%	None Detected
CMM-A.1	84959	Second Floor, Room 206	Cream Cove Molding Mastic	<1.0%	None Detected
CMM-B.1	84960	Second Floor, Hallway	Dark Brown Cove Molding Mastic	<1.0%	None Detected
FT-A.1	84961	Second Floor, 209/210 Storage Room	White 12"x12" Floor Tile	<1.0%	None Detected
FTM-A.1	84962	Second Floor, 209/210 Storage Room	Black Fibrous Floor Tile Mastic from Sample 84961	<1.0%	None Detected
FT-B.1	85489	Northwest Stair Tower	Grey 12"x12" Floor Tile	<1.0%	None Detected
FTM-B.1	85490	Northwest Stair Tower	Black/Yellow Floor Tile Mastic from Sample 85489	<1.0%	None Detected
CTM-A.1	85491	Men's Room, 113B	Yellow Ceramic Tile Mastic	<1.0%	None Detected
WC-A.1	85492	First and Second Floor Exterior Windows	Grey Window Caulk	<1.0%	None Detected
Roof-A.1a	87809	Roof	Black Fibrous Roofing Felts	<1.0%	None Detected

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed: 12/4/97, 12/10/97 Analyst: Andreas Saldivar, Luis Bustillos

Laboratory Results Approved By:

### <u>PARADIGM</u>

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Job Number:

Client: County of Monroe

Location: Iola Complex, Building 7, 350 East Henrietta Road, Rochester, New York

Sample Date: 12/2/97

7572

Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M		Matrix Material %
Roof-A.1a	87809	Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 35% Fiberglass 10%	55%
Roof-A.1b	87810	Roof	Yellow Foam Insulation	None Detected	0%		None Detected	100%
							ELAD ID No. 40059	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/4/97

Microscope:

Olympus BH-2 #235757

alyst:

Mary Dohr

Laboratory Results Approved By:

File ID: Iolab7.xls

# Environmental prvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client:

**County of Monroe** 

Location:

Job Number:

Iola Complex, Building 7, 350 East Henrietta Road, Rochester, New York

Sample Date:

11/26/97

77397

Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
PI-B.1	85488	Basement	White Fibrous Pipe Insulation	Chrysotile 44%	44%		None Detected	56%
FT-B.1	85489	Northwest Stair Tower	Grey 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-B.1	85490	Northwest Stair Tower	Black/Yellow Floor Tile Mastic from Sample 85489	None Detected	0%	*	Cellulose 8%	92%
CTM-A.1	85491	Men's Room, 113B	Yellow Ceramic Tile Mastic	None Detected	0%	*	None Detected	100%
WC-A.1	85492	First and Second Floor Exterior Windows	Grey Window Caulk	None Detected	0%	*	Cellulose 3%	97%
VC-B.1	85493	Basement Windows Exterior	Yellow Fibrous Window Caulk	Chrysotile 11%	11%		None Detected	89%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

11/26/97

Microscope:

Olympus BH-2 #235757

alyst:

Patrick Fitzgerald

Laboratory Results Approved By:

## Environmental prvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 7, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/25/97

Job Number: 77332 Page Number: 2 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Fibers Type &	Matrix Material %
FTM-A.1	84962	Second Floor, 209/210 Storage Room	Black Fibrous Floor Tile Mastic from Sample 84961	None Detected	0%	*	Cellulose 13%	87%
ACT-A.1	84963	Second Floor, Hallway	White Fibrous 12"x12" Adhered Ceiling Tile	None Detected	0%		Cellulose 95%	5%
CTM-A.1	84964	Second Floor, Hallway	Tan Ceiling Tile Mastic from Sample 84963	Chrysotile 5%	5%		None Detected	95%
							·	·
							***************************************	
							~	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 12/28/97

Microscope: Olympus BH-2 #235757

alyst: Patrick Fitzgerald

Laboratory Results Approved By:

File ID: Iolab7.xls

#### PARADIGM Environmental

# Environmental prvices, Inc.

#### 179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 7, 350 East Henrietta Road, Rochester, New York

**Sample Date:** 11/25/97

Job Number: 77332 Page Number: 1 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Fibers Type &	Matrix Material %
WG-A.1	84952	Second Floor, Room 210	White Window Glaze	None Detected	0%		None Detected	100%
SCT-A.1	84953	Second Floor, Hallway	White Fibrous 2'x4' Suspended Ceiling Tile	None Detected	0%		Cellulose 55% Mineral Wool 22%	23%
SCT-B.1	84954	Second Floor, Room 211	White Fibrous 2'x4' Suspended Ceiling Tile	None Detected	0%		Cellulose 55% Mineral Wool 20%	25%
WS-A.1	84955	Second Floor, Room 211, On Column	White Fibrous Wall System, Drywall & Spackle	None Detected	0%		Cellulose 15%	85%
P-A.1	84956	Second Floor, 209/210 Storage Room	White Plaster	None Detected	0%		None Detected	100%
PI-A.1	84957	Second Floor, Room 211	Yellow Fibrous Pipe Insulation	None Detected	0%		Mineral Wool 100%	0%
CMF-A.1	84958	Second Floor, Room 210	Yellow/Black Carpet Mastic	None Detected	0%	*	Cellulose 9%	91%
CMM-A.1	84959	Second Floor, Room 206	Cream Cove Molding Mastic	None Detected	0%	*	None Detected	100%
CMM-B.1	84960	Second Floor, Hallway	Dark Brown Cove Molding Mastic	None Detected	0%	*	Cellulose 6%	94%
FT-A.1	84961	Second Floor, 209/210 Storage Room	White 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

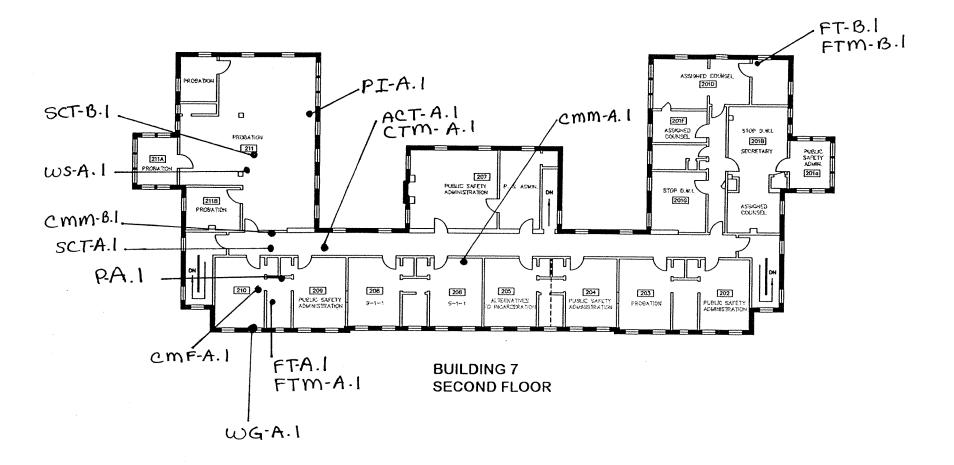
Date Analyzed: 12/28/97

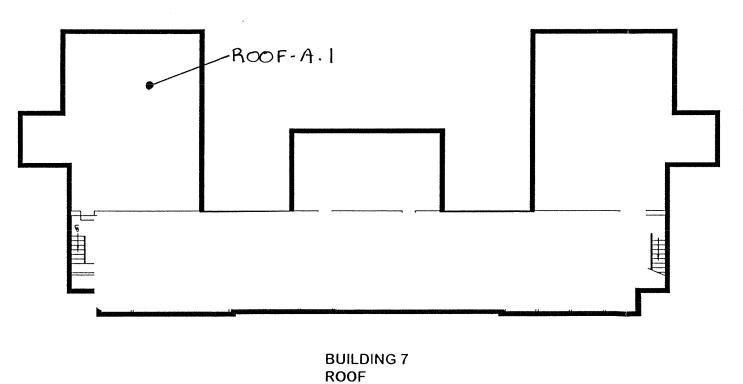
Microscope: Olympus BH-2 #235757 alyst: Patrick Fitzgerald

Laboratory Results Approved By:

File ID: Iolab7.xls

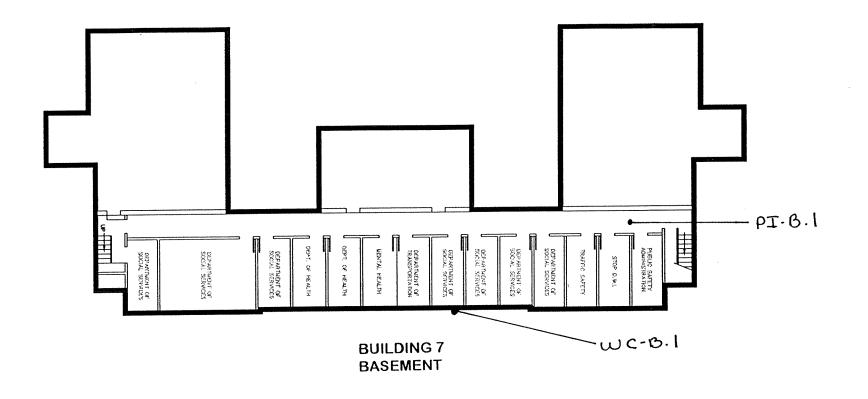
## SECTION V LABORATORY REPORTS

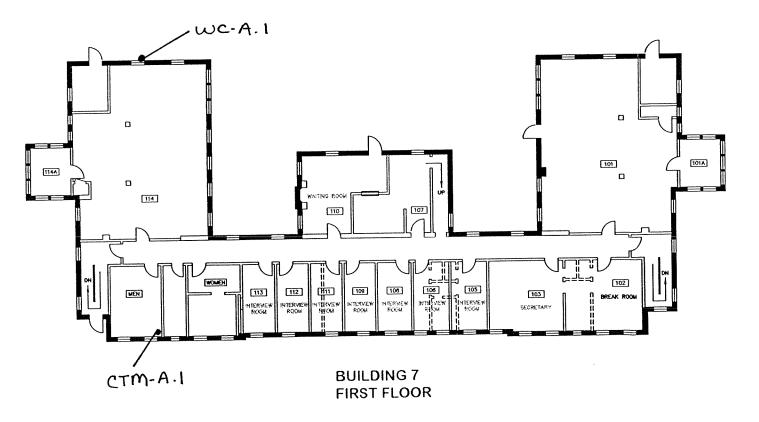




BUILDING 7
PUBLIC SAFETY

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997





BUILDING 7
PUBLIC SAFETY

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997

# SECTION IV DRAWINGS

### **BUILDING EXTERIOR**

Exterior Yellow Window Caulk

70

linear feet

Total Asbestos Containing Materials on the Building Exterior:

**Yellow Window Caulk** 

70

linear feet

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

### **2ND FLOOR**

White Pipe Insulation:	50	linear feet
Total Asbestos Containing Materials in the Stairwells:		
Southeast Stairwell White Pipe Insulation	25	linear feet
Northeast Stairwell White Pipe Insulation	25	linear feet
STAIRWELLS		
Tan Ceiling Tile Mastic:	505	square feet
Total Asbestos Containing Materials on the 2nd Floor:		
2nd Floor Hallway Tan Ceiling Tile Mastic	505	square feet

### **BASEMENT**

Tan Ceiling Tile Mastic:	1,335	square feet
Total Asbestos Containing Materials on the 1st Floor:		
1st Floor Hallway Tan Ceiling Tile Mastic	505	square feet
Room 113-B Bathroom Tan Ceiling Tile Mastic	415	square feet
Room 113-A Bathroom Tan Ceiling Tile Mastic	415	square feet
1ST FLOOR		
White Pipe Insualtion	650	linear feet
Total Asbestos Containing Materials in the Basement:		
Basement White Pipe Insulation	650	linear feet

### Total square/linear footage of asbestos containing materials

Pipe Insulation: 700 linear feet

Ceiling Tile Mastic: 1,840 square feet

Window Caulk: 70 linear feet

### Total cost estimate for asbestos abatement

Pipe Insulation: \$10,500

Ceiling Tile Mastic: \$3,680

Window Caulk: \$1,000

The following pages summarize the materials that were found to be asbestos containing in Building 7.

# IOLA CAMPUS BUILDING 7 PUBLIC SAFETY ROCHESTER, NEW YORK

#### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 7, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified as ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified as ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The **1996 Labeling of Asbestos Insulation and Update of the 1989 Survey Report** refers to the Steam Tunnels, Power House, and Building 5 only.

Paradigm cannot compare the 1996 Asbestos Survey to this survey due to the fact that Building 7 was not included in the 1996 report.

Paradigm reviewed the **1989 Survey of the County Buildings** provided by Monroe County and noted the following:

The 1989 Survey of the County Buildings Report was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 7. The 1989 survey included sampling and analysis of pipe insulation and ceiling tiles only. This survey includes sampling and analysis of additional possible asbestos containing material types. Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM per the 1997 survey:

Window Caulk Ceiling Tile Mastic

## SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 7 PUBLIC SAFETY ROCHESTER, NEW YORK

#### LIMITATIONS

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Building 7, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations.

## SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 7 PUBLIC SAFETY ROCHESTER, NEW YORK

#### INTRODUCTION

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 7, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 7, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method 198.1 ("Polarized Light Microscopy Methods for identifying and quantitating asbestos in bulk samples").

# SECTION I INTRODUCTION

# IOLA CAMPUS BUILDING 7 PUBLIC SAFETY ROCHESTER, NEW YORK

### TABLE OF CONTENTS

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- INTRODUCTION

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- LIMITATIONS

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- CONCLUSIONS

**SECTION IV** 

- DRAWINGS

SECTION V

- LABORATORY REPORTS

### BUILDING #7 PUBLIC SAFETY

Environmental Services, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

### T.E.M. Results

Client: Location: **County of Monroe** 

Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Job No: 77488 Sample Date: 12/1/97 Page Number: 2 of 2

				TEM A	nalysis
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type
FT-K.1	87788	Second Floor, Main Corridor	Cream 12"x12" Floor Tile	<1.0%	None Detected
FTM-K.1	87789	Second Floor, Main Corridor	Tan Floor Tile Mastic from Sample 87788	<1.0%	None Detected
SV-C.1	87790	Second Floor, Room 219	Brown Sheet Vinyl	<1.0%	None Detected
Roof-A.1a	87802	West Lower Roof	Black Fibrous Roofing Felts	<1.0%	None Detected
Roof-A.1b	87803	West Lower Roof	Black Fibrous Roofing Felts	<1.0%	None Detected
Roof-A.1c	87804	West Lower Roof	Black Fibrous Roofing Felts	<1.0%	None Detected
Roof-B.1a	87806	Upper Main Roof	Black Fibrous Roofing Felts	<1.0%	None Detected
		1		FLADID No. 400	

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

**Laboratory Results Approved By:** 

# Environmental Prvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client:

**County of Monroe** 

Location:

Job Number:

Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/2/97

77572

Page Number:

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Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
Roof-A.1a	87802	West Lower Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 38% Fiberglass 16%	46%
Roof-A.1b	87803	West Lower Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 58% Fiberglass 3%	39%
Roof-A.1c	87804	West Lower Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 63%	37%
Roof-A.1d	87805	West Lower Roof	Brown Fibrous Roof Insulation	None Detected	0%		Cellulose 96%	4%
Roof-B.1a	87806	Upper Main Roof	Black Fibrous Roofing Felts	None Detected	0%	*	Cellulose 42%	58%
pof-B.1b	87807	Upper Main Roof	White Roofing Insulation	None Detected	0%		Cellulose 3%	97%
Roof-B.1c	87808	Upper Main Roof	Brown Fibrous Roof Insulation	None Detected	0%		Cellulose 95%	5%
	48.8							

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/4/97

Microscope:

Olympus BH-2 #235757

^nalyst:

Mary Dohr

Laboratory Results Approved By:

### Environmental

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client: County of Monroe

Location: Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

**Sample Date:** 12/2/97

Job Number: 77567 Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
FT-J.1	87786	First Floor, Room 104	Tan 12"x12" Floor Tile	None Detected	0%	*	Cellulose 5%	95%
FTM-J.1	87787	First Floor, Room 104	Yellow Floor Tile Mastic from Sample 87786	None Detected	0%	*	None Detected	100%
FT-K.1	87788	Second Floor, Main Corridor	Cream 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-K.1	87789	Second Floor, Main Corridor	Tan Floor Tile Mastic from Sample 87788	None Detected	0%	*	Wollastonite 15%	85%
SV-C.1	87790	Second Floor, Room 219	Brown Sheet Vinyl	None Detected	0%	*	None Detected	100%
CT-B.1	87791	Second Floor, Room 205	White Fibrous 2'x4' Pits & Valley Pattern Suspended Ceiling Tile	None Detected	0%		Cellulose 55% Mineral Wool 20%	25%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/3/97

Microscope:

Olympus BH-2 #235757

alyst:

Patrick Fitzgerald

**Laboratory Results Approved By:** 

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client:

**County of Monroe** 

Location:
Job Number:

Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/1/97 2 of 2

77554

Page Number:

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
FTM-H.1	87673	First Floor, Main Corridor	White Fibrous Floor Tile Mastic from <b>Sample 87673</b>	None Detected	0%	*	Wollastonite 21%	79%
SV-A.1	87674	First Floor, Main Corridor	Black Fibrous Sheet Vinyl	None Detected	0%	*	Wollastonite 20%	80%
SVM-A.1	87675	First Floor, Main Corridor	Yellow Sheet Vinyl Mastic from Sample 87674	None Detected	0%	*	None Detected	100%
SV-B.1	87676	First Floor, Main Corridor	White Fibrous Sheet Vinyl	None Detected	0%	*	Wollastonite 20%	80%
SVM-B.1	87677	First Floor, Main Corridor	Yellow Sheet Vinyl Mastic from Sample 87676	None Detected	0%	*	None Detected	100%
j								

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/2/97

Microscope:

Olympus BH-2 #235757

alyst:

Patrick Fitzgerald

Laboratory Results Approved By:

### PARADIGM Environmental ervices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Sample Date: 12/1/97

1 of 2

Page Number:

Job Number: 77554

Non-Asbestos Matrix Total Description Asbestos Lab ID Sampling Location Client ID Fibers Type & Asbestos E Fibers Type & Material Percentage Percentage % М 100% Yellow 9"x9" Floor Tile None Detected 0% None Detected 87664 First Floor, Room 112 FT-D.1 Cellulose 5% 95% None Detected 0% 87665 First Floor, Room 112 Yellow Floor Tile Mastic \* FTM-D.1 from Sample 87664 88% 0% Wollastonite 12% First Floor, Main Black 12"x12" Floor Tile None Detected 87666 FT-E.1 Corridor Cellulose 13% 87% 0% \* None Detected 87667 First Floor, Main Black Fibrous Floor Tile FTM-E.1 Mastic from Sample 87666 Corridor None Detected 100% None Detected 0% White 18"x18" Floor Tile \* 87668 First Floor, Room 101 FT-F.1 Yellow Fibrous Floor Tile None Detected 0% \* Wollastonite 22% 78% First Floor, Room 101 87669 FTM-F.1 Mastic from Sample 87668 0% Cellulose 4% 96% Black 18"x18" Floor Tile None Detected \* First Floor, Room 101 87670 FT-G.1 First Floor, Room 101 Yellow Fibrous Floor Tile 72% None Detected 0% Wollastonite 28% 87671 FTM-G.1 Mastic from Sample 87670 100% 0% None Detected First Floor, Main Brown 2'x2' Floor Tile None Detected 87672 FT-H.1 Corridor

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine

if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 12/2/97

Microscope: Olympus BH-2 #235757
Analyst: Patrick Fitzgerald

Laboratory Results Approved By:

### **PARADIGM Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client:

**County of Monroe** 

Location:

Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/1/97

Job Number:

Page Number:

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Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
CRM-A.1	87062	First Floor, Women's Room	Yellow Ceramic Tile Mastic	None Detected	0%	*	None Detected	100%
ACT-A.1	87063	First Floor, Room 101H	Yellow 12"x12" Adhered Ceiling Tile	None Detected	0%		Cellulose 95%	5%
CTM-A.1	87064	First Floor, Room 101H	Brown Ceiling Tile Mastic from Sample 87063	None Detected	0%	*	Cellulose 5%	95%
CTM-B.1	87065	First Floor, Room 102A	Black Ceiling Tile and Cork Mastic	Chrysotile 6%	6%		None Detected	94%
WG-A.1	87066	Exterior Windows	White Window Glaze	Chrysotile 9%	9%		None Detected	91%
	and the second s							

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/1/97

Microscope:

Olympus BH-2 #235757

Analyst:

Patrick Fitzgerald

Laboratory Results Approved By:

### PARADIGM Environmenta

Environmental prvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client:

**County of Monroe** 

Location:

Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/4/97

Job Number:

77627

Page Number:

1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
ACT-B.1	88270	Third Floor, Main Corridor	White Fibrous 12"x12" Adhered Ceiling Tile	None Detected	0%		Cellulose 88%	12%
WC-A.1	88272	Exterior of Building	White Window Caulk	Chrysotile 7%	7%		None Detected	93%
							±, °> 5	
				A STATE OF THE STA				

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

Date Analyzed:

12/4/97

Microscope:

Olympus BH-2 #235757

Analyst:

Patrick Fitzgerald

Laboratory Results Approved By:

### <u>PARADIGM</u>

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client: County of Monroe

Location: Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Sample Date: 12/1/97

Job Number: 77553 Page Number: 2 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos	Total	T	Non-Asbestos	Matrix
				Fibers Type & Percentage	Asbestos	E M	Fibers Type & Percentage	Material %
FT-C.1	87658	First Floor, Room 116D	Grey 12" x 12" Floor Tile	None Detected	0%	*	Cellulose 2%	98%
FTM-C.1	87659	First Floor, Room 116D	Black/Yellow Floor Tile Mastic from <b>Sample 87657</b>	None Detected	0%	*	None Detected	100%
CMF-A.1	87660	First Floor, Room 116C	Tan Carpet Mastic on Floor	None Detected	0%	*	None Detected	100%
WS-A.1	87661	First Floor, Room 118A	White Fibrous Wall System, Drywall & Spackle	None Detected	0%		Cellulose 13%	87%
SCT-A.1	87662	First Floor, Room 118B	White Fibrous 2'x4' Suspended Ceiling Tile	None Detected	0%		Cellulose 53% Mineral Wool 17%	30%
)	***************************************							
	<del></del>							
							ELAPID No : 10058	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

e Analyzed:

12/2/97

Microscope:

Olympus BH-2 #235757

Analyst:

Patrick Fitzgerald

File ID: lolab5.xls

Laboratory Results Approved By:

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client:

**County of Monroe** 

Location:
Job Number:

Iola Complex, Building 5, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/1/97

Page Number:

1 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
PI-A.1	87648	First Floor, Room 115A	Grey Fibrous Pipe Insulation	Chrysotile 18%	18%		Cellulose 70%	12%
PI-B.1	87649	First Floor, Room 115	White Fibrous Pipe Insulation	Chrysotile 66%	66%		None Detected	34%
PI-C.1	87650	First Floor, Room 115	Yellow Fibrous Pipe Insulation	None Detected	0%		Mineral Wool 100%	0%
CMM-A.1	87651	First Floor, Room 115	Brown Cove Molding Mastic	None Detected	0%	*	None Detected	100%
P-A.1	87652	First Floor, Room 115A	White Plaster	None Detected	0%		Cellulose 3%	97%
FT-A.1	87653	First Floor, Room 118A	White 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-A.1	87654	First Floor, Room 118A	Black Floor Tile Mastic from Sample 87653	None Detected	0%	*	Cellulose 8%	92%
FT-B.1	87655	First Floor, Room 118A	Black 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-B.1	87656	First Floor, Room 118A	Yellow Floor Tile Mastic from Sample 87655	None Detected	0%	*	Cellulose 6%	94%
FT-C.1	87657	First Floor, Room 116D	Grey 12"x12" Floor Tile	None Detected	0%	*	Cellulose 2%	98%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/2/97

Microscope:

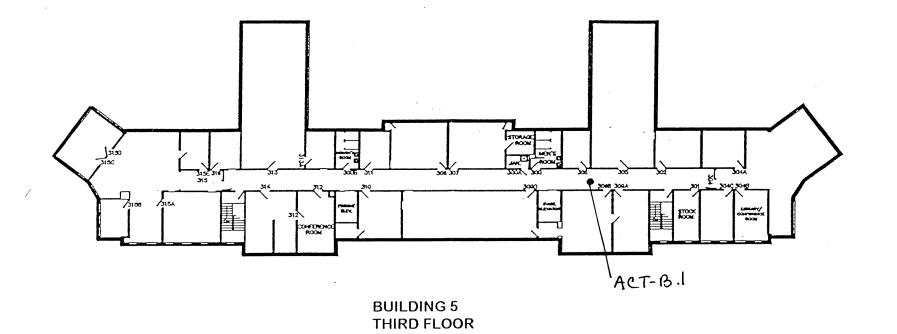
Olympus BH-2 #235757

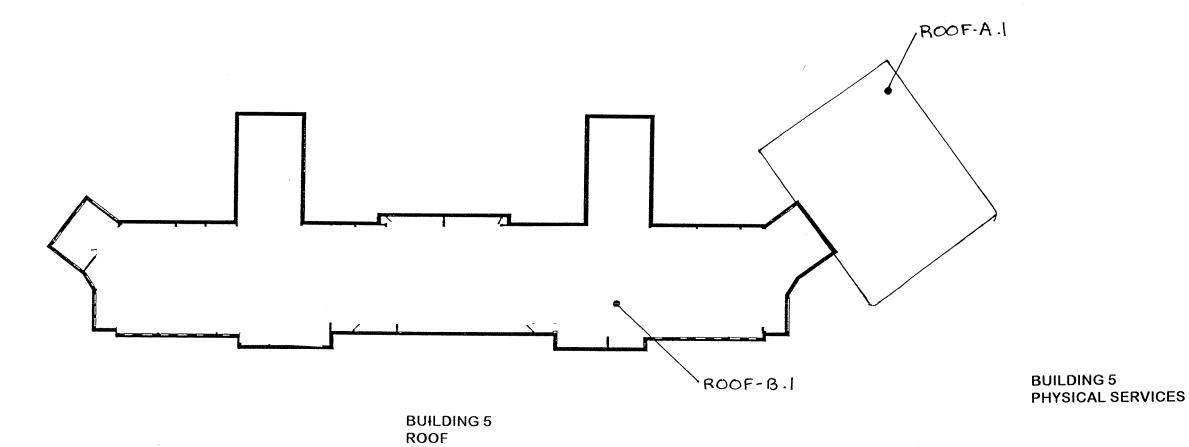
alyst:

Patrick Fitzgerald

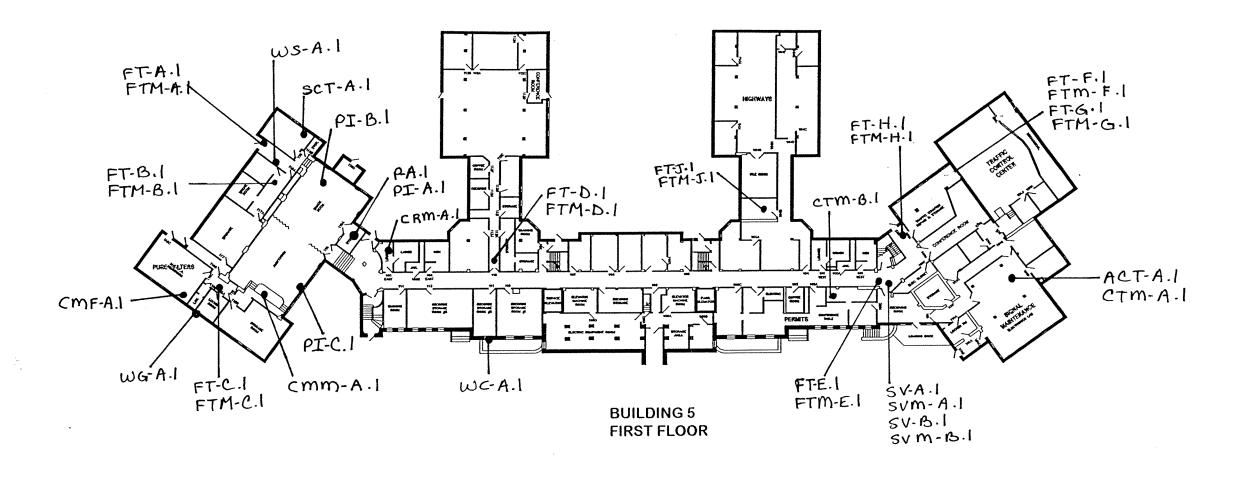
Laboratory Results Approved By:

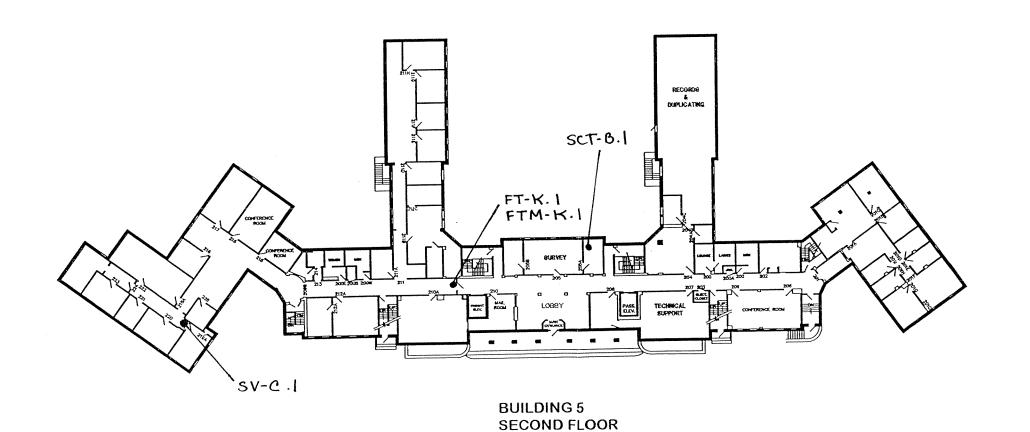
## SECTION V LABORATORY REPORTS





MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997





BUILDING 5
PHYSICALSERVICES

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVE' DECEMBER, 1997

# SECTION IV DRAWINGS

### **STAIRWELLS**

North Stairwell Grey Pipe Insulation	5	linear feet
Northwest Stairwell Grey Pipe Insulation	10	linear feet
Southwest Stairwell Grey Pipe Insulation	30	linear feet
Stairwell Adjacent to Dept. of Env. Svcs. Leading to 3 <sup>rd</sup> Flo	<u>oor</u> 5	linear feet
Total Asbestos Containing Materials in Stairwells:		
Grey Pipe Insulation:	50	linear feet
BUILDING EXTERIOR	<u> </u>	
Exterior White Window Glaze	6,300	linear feet
Total Asbestos Containing Materials on the Building Exter	ior:	
White Window Glaze:	6,300	linear feet

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

### 3RD FLOOR

Grey Pipe Insulation:	105	linear feet
Total Asbestos Containing Materials on the 3rd Floor:		
Space 315 Grey Pipe Insulation	20	linear feet
Space 313 Grey Pipe Insulation	15	linear feet
Space 309-A, B, C, D Grey Pipe Insulation	10	linear feet
Space 308 Grey Pipe Insulation	5	linear feet
Space 307 Grey Pipe Insulation	5	linear feet
Space 305 Grey Pipe Insulation	40	linear feet
Space 304-A, B, C Grey Pipe Insulation	10	linear feet

#### **2ND FLOOR**

Space 201 Grey Pipe Insulation	20	linear feet
Space 204, 204A, 204B, & 204C Grey Pipe Insulation	50	linear feet
Space 207 White Pipe Insulation Grey Pipe Insulation	25 25	linear feet linear feet
Space 208 White Pipe Insulation Grey Pipe Insulation	25 25	linear feet linear feet
Space 210 Grey Pipe Insulation	60	linear feet
Space 210-A Grey Pipe Insulation	40	linear feet
Space 211, 211A, & 211C Grey Pipe Insulation	85	linear feet
Space 212 Grey Pipe Insulation	60	linear feet
Space 212-A Grey Pipe Insulation	60	linear feet
Space 213 Grey Pipe Insulation	10	linear feet
2nd Floor Corridor Grey Pipe Insulation White Pipe Insulation	10 25	linear feet linear feet
Total Asbestos Containing Materials on the 2nd Floor:		
Grey Pipe Insulation:	445	linear feet
White Pipe Insulation:	75	linear feet

#### 1<sup>ST</sup> FLOOR CONTINUED

#### **Total Asbestos Containing Materials on the 1st Floor:**

White Pipe Insulation: 655 square feet

Grey Pipe Insulation: 164 square feet

Black Ceiling Tile & Cork Mastic: 640 square feet

#### 1ST FLOOR CONTINUED

Space 110 White Pipe Insulation	45	linear feet
Space 111 White Pipe Insulation	30	linear feet
Space 112 Grey Pipe Insulation	30	linear feet
Space 112-B Grey Pipe Insulation	15	linear feet
Space 112-C Grey Pipe Insulation	15	linear feet
Space 112-F Grey Pipe Insulation	12	linear feet
Space 112-H Grey Pipe Insulation	10	linear feet
Space 112-I Grey Pipe Insulation	15	linear feet
Space 113 White Pipe Insulation	40	linear feet
Space 114 White Pipe Insulation	30	linear feet
Space 115 White Pipe Insulation	10	linear feet
Space 115-A Grey Pipe Insulation	15	linear feet
Main Corridor White Pipe Insulation	60	linear feet
Vestibule North Grey Pipe Insulation	20	linear feet

#### **BASEMENT**

Crawl Space White Pipe Insulation	4,025	linear feet
Total Asbestos Containing Materials in the Basement:		
White Pipe Insulation:	4,025	linear feet
1ST FLOOR		
Space 100 (Women's Bathroom-North) White Pipe Insulation	10	linear feet
Space 100 (Women's Bathroom-South) White Pipe Insulation	10	linear feet
Space 100A Grey Pipe Insulation	12	linear feet
Space 101 White Pipe Insulation	100	linear feet
Corridor Leading to Space 101 White Pipe Insulation	30	linear feet
Space 102-A Black Ceiling Tile & Cork Mastic White Pipe Insulation	640 40	square feet linear feet
Space 102-C White Pipe Insulation	10	linear feet
Space 104 A-J Grey Pipe Insulation	20	linear feet
Space 109-A White Pipe Insulation	50	linear feet
Hallway Leading to Space 109-A White Pipe Insulation	110	linear feet
Space 109-C White Pipe Insulation	80	linear feet

#### Total square/linear footage of asbestos containing materials

Pipe Insulation: 5,519 linear feet

Window Glaze: 6,300 square feet

Ceiling Tile/Cork Mastic: 640 linear feet

#### Total cost estimate for asbestos abatement

Pipe Insulation: \$82,800

Window Glaze: \$15,800

Ceiling Tile/Cork Mastic: \$1,300

The following pages summarize the materials that were found to be asbestos containing in Building 5.

# IOLA CAMPUS BUILDING 5 PHYSICAL SERVICES ROCHESTER, NEW YORK

#### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 5, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by a Paradigm inspector, and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified as ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM are confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The Paradigm inspectors concur with the condition of pipe insulation as noted in the May, 1996 labeling and inspection survey. The pipe insulation in the basement crawlspace of Building 5 remains in poor condition.

Paradigm reviewed the **1989 Survey of the County Buildings** provided by Monroe County and noted the following:

The **1989 Survey of the County Buildings** was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 5. The 1989 survey included sampling and analysis of pipe insulation and ceiling tiles only. This survey includes sampling and analysis of additional possible asbestos containing material types. Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM per the 1997 survey:

Window Caulk Window Glaze Ceiling Tile/Cork Mastic

### SECTION III CONCLUSIONS

### SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 5 PHYSICAL SERVICES ROCHESTER, NEW YORK

#### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Building 5, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations. Room 200B on the 2nd Floor could not be accessed for inspection at the time of this survey.

### SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 5 PHYSICAL SERVICES ROCHESTER, NEW YORK

#### INTRODUCTION

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 5, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 5, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method 198.1 ("Polarized Light Microscopy Methods for identifying and quantitating asbestos in bulk samples").

# IOLA CAMPUS BUILDING 5 PHYSICAL SERVICES ROCHESTER, NEW YORK

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## SECTION I INTRODUCTION

#### **IOLA CAMPUS BUILDING 5** PHYSICAL SERVICES **ROCHESTER, NEW YORK**

#### **TABLE OF CONTENTS**

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- CONCLUSIONS

SECTION IV

- DRAWINGS

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### BUILDING #5 PHYSICAL SERVICES

#### **PARADIGM**

Environmental

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Services, Inc.

#### T.E.M. Results

Client: Location: **County of Monroe** 

Iola Complex, Building 4, 350 East Henrietta Road, Rochester, New York

Job No: 77301 Sample Date: 11/24/97

Page Number: 1 of 1

					nalysis
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type
FT-A.1	84719	First Floor, Bedroom 10	Green 9"x9" Floor Tile	<1.0%	None Detected
FTM-A.1	84720	First Floor, Bedroom 10	Yellow Floor Tile Mastic from Sample 84719	<1.0%	None Detected
Roof-A.1a	87947	Roof	Black Fibrous Roofing	<1.0%	None Detected
Roof-A.1b	87948	Roof	Black Fibrous Roofing	<1.0%	None Detected
Roof-A.1c	87949	Roof	Black with Grey Stones Fibrous Roofing	<1.0%	None Detected
) /					

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

**Laboratory Results Approved By:** 

#### <u>PARADIGM</u>

### Environmental

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Job Number:

Client: County of Monroe

Location: Iola Complex, Building 4, 350 East Henrietta Road, Rochester, New York

**Sample Date:** 12/2/97

Page Number:

1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
Roof-A.1a	87947	Roof	Black Fibrous Roofing	None Detected	0%	*	Cellulose 41%	59%
Roof-A.1b	87948	Roof	Black Fibrous Roofing	None Detected	0%	*	Cellulose 65% Fiberglass 13%	22%
Roof-A.1c	87949	Roof	Black with Grey Stones Fibrous Roofing	None Detected	0%	*	Cellulose 29%	71%
							,	
7								

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/3/97

Microscope:

Olympus BH-2 #235757

lyst:

Patrick Fitzgerald

Laboratory Results Approved By:

#### PARADIGM Environmenta

### Fnvironmental arvices, Inc.

#### 179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client:

**County of Monroe** 

Location: Job Number: Iola Complex, Building 4, 350 East Henrietta Road, Rochester, New York

Sample Date:

11/24/97

77301

Page Number: 2 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
EPX-A.1	84728	Linen Closet	Red Epoxy Flooring	Chrysotile 12%	12%		None Detected	88%
CA-A.1	84729	Exterior of Building on Boarded up Windows	Yellow Fibrous Caulk	Chrysotile 12%	12%		None Detected	88%
j								
							51.45 JD M 40050	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

Date Analyzed:

11/25/97

Microscope:

Olympus BH-2 #235757

^nalyst:

Patrick Fitzgerald

**Laboratory Results Approved By:** 

#### **PARADIGM**

#### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

rvices, Inc.

Client: County of Monroe

Location: Iola Complex, Building 4, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/24/97

Job Number: 77301 Page Number: 1 of 2

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
P-A.1	84718	First Floor, Bedroom 10	Grey Plaster	None Detected	0%		None Detected	100%
FT-A.1	84719	First Floor, Bedroom 10	Green 9"x9" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-A.1	84720	First Floor, Bedroom 10	Yellow Floor Tile Mastic from Sample 84719	None Detected	0%	*	Cellulose 6%	94%
FT-B.1	84721	First Floor, Reception Room	Grey 9"x9" Floor Tile	None Detected	0%	*	None Detected	100%
TP-A.1	84722	First Floor, Reception Room	Black Tar Paper from Sample 84721	None Detected	0%	*	Cellulose 75%	25%
TM-B.1	84723	First Floor, Reception Room	Black Fibrous Floor Tile Mastic from Sample 84721	Chrysotile 4%	4%		Cellulose 6%	90%
PI-A.1	84724	First Floor, Bathroom	White Fibrous Pipe Insulation	Chrysotile 57%	57%		Cellulose 18%	25%
WAC-A.1	84725	First Floor, West Sleeping Porch	Tan Wali Caulk	Chrysotile 9%	9%		None Detected	91%
WB-A.1	84726	First Floor, West Sleeping Porch	Brown Fibrous Wall Board	None Detected	0%		Cellulose 82%	18%
WG-A.1	84727	First Floor, West Sleeping Porch	White Window Glaze	None Detected	0%		None Detected	100%

ELAP ID No.: 10958

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\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

11/25/97

Microscope:

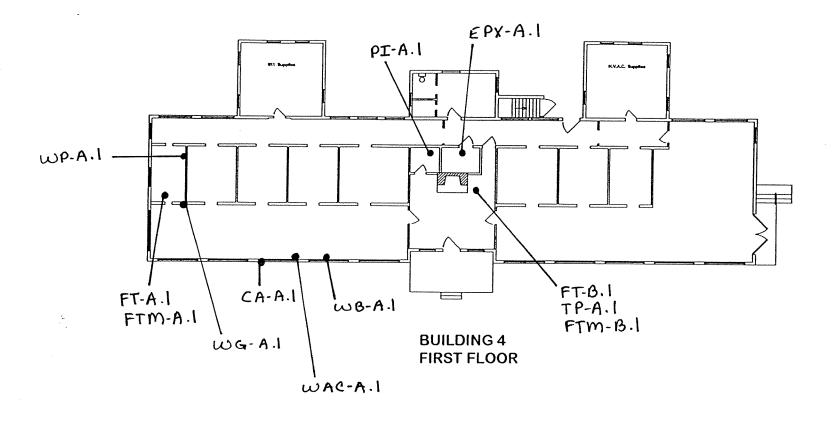
Olympus BH-2 #235757

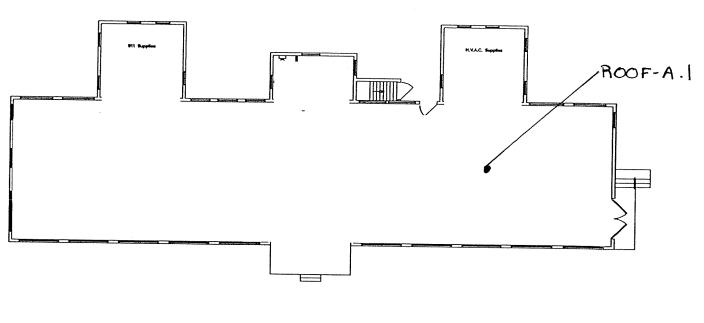
ılyst:

Patrick Fitzgerald

Laboratory Results Approved By:

### SECTION V LABORATORY REPORTS





BUILDING 4 ROOF BUILDING 4 PARKS STORAGE

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997

## SECTION IV DRAWINGS

#### **ATTIC**

Attic

White Pipe Insulation

125

linear feet

**Total Asbestos Containing Materials in the Attic:** 

White Pipe Insulation:

125

linear feet

**BUILDING EXTERIOR** 

**Exterior** 

Yellow Caulk

300

linear feet

**Total Asbestos Containing Materials on the Building Exterior:** 

**Yellow Caulk** 

300

linear feet

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

#### **BASEMENT**

Basement White Pipe Insulation	40	linear feet
Total Asbestos Containing Materials in the Basement:		
White Pipe Insulation	40	linear feet
1ST FLOOR		
Bathroom Grey 9" x 9" Floor Tile & Mastic Black Tar Paper White Pipe Insulation	40 40 2	square feet square feet linear feet
<u>Linen Closet</u> Red Epoxy Floor	40	square feet
Reception Room Grey 9" x 9" Floor Tile & Mastic Black Tar Paper	425 425	square feet square feet
Sleeping Porch West Tan Wall Caulk	150	linear feet
Sleeping Porch East Tan Wall Caulk	150	linear feet
Total Asbestos Containing Materials on the 1stFloor:		
Grey 9"x 9" Floor Tile & Mastic:	465	square feet
Black Tar Paper:	465	square feet
White Pipe Insulation:	2	linear feet
Red Epoxy Floor:	40	square feet
Tan Wall Caulk:	300	square feet

Window Caulk Epoxy Flooring Floor Tile, Tar Paper, & Mastic Wall Caulk

#### Total square/linear footage of asbestos containing materials:

Pipe Insulation:	167	linear feet
Floor Tile, Tar Paper, & Mastic:	465	square feet
Epoxy Flooring:	40	square feet
Wall Caulk:	300	square feet
Window Caulk:	300	linear feet

#### Total cost estimate for asbestos abatement:

Pipe Insulation:	\$2,500
Floor Tile, Tar Paper, & Mastic:	\$1,300
Epoxy Flooring:	\$500
Wall Caulk:	\$600
Window Caulk:	\$1,400

The following pages summarize the materials that were found to be asbestos containing in Building 4.

Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM per the 1997 survey:

Window Caulk Epoxy Flooring Floor Tile, Tar Paper, & Mastic Wall Caulk

#### Total square/linear footage of asbestos containing materials:

Pipe Insulation:	167	linear feet
Floor Tile, Tar Paper, & Mastic:	465	square feet
Epoxy Flooring:	40	square feet
Wall Caulk:	300	square feet
Window Caulk:	300	linear feet

#### Total cost estimate for asbestos abatement:

Pipe Insulation:	\$2,500
Floor Tile, Tar Paper, & Mastic:	\$1,300
Epoxy Flooring:	\$500
Wall Caulk:	\$600
Window Caulk:	\$1,400

The following pages summarize the materials that were found to be asbestos containing in Building 4.

# IOLA CAMPUS BUILDING 4 LODGE ROCHESTER, NEW YORK

#### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 4, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified as ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified as ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

The Paradigm inspectors noted asbestos containing pipe insulation located in the attic to be in poor condition.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey Report refers to the Steam Tunnels, Power House, and Building 5 only.

Paradigm cannot compare the 1996 Asbestos Survey to this survey due to the fact that Building 4 was not included in the 1996 report.

Paradigm reviewed the **1989 Survey of the County Buildings** provided by Monroe County and noted the following:

The 1989 Survey of the County Buildings Report was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 4. The 1989 survey included sampling and analysis of pipe insulation and ceiling tiles only. This survey includes sampling and analysis of additional possible asbestos containing material types.

### SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 4 LODGE ROCHESTER, NEW YORK

#### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Building 4, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations. Bedroom #6 on the first floor could not be accessed for sampling at the time of this inspection.

### SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 4 LODGE ROCHESTER, NEW YORK

#### INTRODUCTION

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 4, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 4, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method 198.1 ("Polarized Light Microscopy Methods for identifying

and quantitating asbestos in bulk samples").

### SECTION I INTRODUCTION

# IOLA CAMPUS BUILDING 4 LODGE ROCHESTER, NEW YORK

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**SECTION II** 

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### BUILDING #4 LODGE

#### **PARADIGM**

**Environmental** 

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

#### Services, Inc.

#### T.E.M. Results

Client: Location: **County of Monroe** 

Iola Complex, Building 2, 350 East Henrietta Road, Rochester, New York

Job No: 77319 Sample Date: 11/24/97

Page Number: 1 of 1

				TEM Analysis		
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type	
CRM-A.1	84862	Garage Area Old Restroom	Tan Ceramic Tile Mastic	<1.0%	None Detected	
Roof-A.1a	87945	Roof	Black Fibrous Roofing	<1.0%	None Detected	
Roof-A.1b	87946	Roof	Black with Grey Stones Fibrous Roofing	<1.0%	None Detected	
		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

**Laboratory Results Approved By:** 

#### PARADIGM Environmental

Job Number:

### Environmental prvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 2, 350 East Henrietta Road, Rochester, New York

Sample Date: 12/2/97

77587 Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type &	Total Asbestos	T E	Non-Asbestos Fibers Type &	Matrix Material
				Percentage	Asuesios	M	Percentage	%
Roof-A.1a	87945	Roof	Black Fibrous Roofing	None Detected	0%	*	Cellulose 39% Fiberglass 8%	53%
Roof-A.1b	87946	Roof	Black with Grey Stones Fibrous Roofing	None Detected	0%	*	Cellulose 26%	74%
							· · · · · · · · · · · · · · · · · · ·	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 12/3/97

Microscope: Olympus BH-2 #235757
\* ralyst: Patrick Fitzgerald

Laboratory Results Approved By:

### PARADIGM Environmental

#### 179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client:

**County of Monroe** 

Location:
Job Number:

Iola Complex, Building 2, 350 East Henrietta Road, Rochester, New York

Sample Date:

11/24/97

77319

7040

Page Number:

1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
PI-A.1	84861	Garage Area Above Plaster	White Fibrous Pipe Insulation	Chrysotile 40%	40%		None Detected	60%
CRM-A.1	84862	Garage Area Old Restroom	Tan Ceramic Tile Mastic	None Detected	0%	*	None Detected	100%
EPX-A.1	84863	Rodent Control Room	Red Epoxy	Chrysotile 9%	9%		None Detected	91%
P-A.1	84864	Garage Area	Grey Plaster	None Detected	0%		Cellulose 6%	94%
WG-A.1	84865	Exterior Window, North Porch	White Window Glaze	None Detected	0%		None Detected	100%
WG-B.1	84866	Exterior Window, East Side	Red Window Glaze	None Detected	0%		None Detected	100%
							ELAD ID No : 10058	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

11/25/97

Microscope:

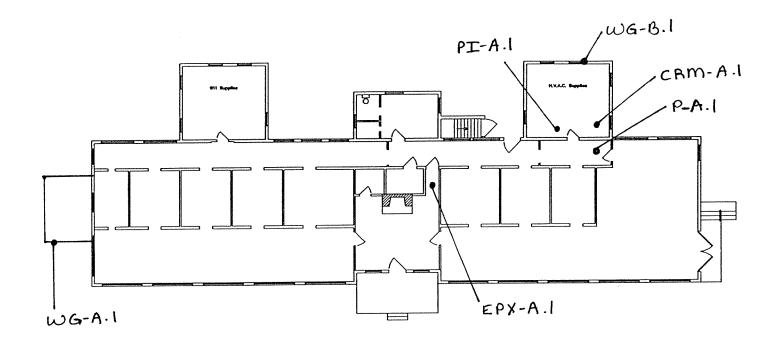
Olympus BH-2 #235757

Analyst:

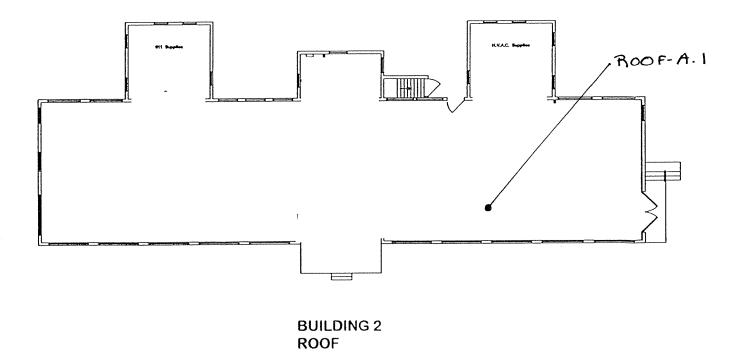
Patrick Fitzgerald

Laboratory Results Approved By:

## SECTION V LABORATORY REPORTS



BUILDING 2 FIRST FLOOR



BUILDING 2 PHYSICAL SERVICES

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997

# SECTION IV DRAWINGS

### **BASEMENT**

Basement White Pipe Insulation	50	linear feet					
Total Asbestos Containing Materials in the Basement:							
White Pipe Insulation:	50	linear feet					
1ST FLOOR							
Construction Storage White Pipe Insulation	60	linear feet					
Garage/Shop White Pipe Insulation	300	linear feet					
<u>Lawn Mower Storage</u> White Pipe Insulation	220	linear feet					
Paint Department White Pipe Insulation	220	linear feet					
Red Epoxy Floor White Pipe Insulation	500 300	square feet linear feet					
Total Asbestos Containing Materials on the 1st Floor:							
Red Epoxy Floor:	500	square feet					
White Pipe Insulation:	1,110	linear feet					

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24-December 4, 1997.

<sup>\*</sup>All quantities are approximations.

This survey includes sampling and analysis of additional possible asbestos containing materials types. Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM as per the 1997 survey:

**Epoxy Flooring** 

### Total square/linear footage of asbestos containing materials

Pipe Insulation: 1,160 linear feet

Epoxy Flooring: 500 square feet

### Total cost estimate for asbestos abatement

Pipe Insulation: \$17,400

Epoxy Flooring: \$1,250

The following pages summarize the materials that were found to be asbestos containing in Building 2.

# IOLA CAMPUS BUILDING 2 LODGE ROCHESTER, NEW YORK

### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 2, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors, and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings.

Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials are classified as ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified as ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

The Paradigm inspectors noted asbestos containing pipe insulation located in the attic to be in poor condition.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey Report refers to the Steam Tunnels, Power House, and Building 5 only.

Paradigm cannot compare the **1996 Asbestos Survey** to this survey due to the fact that Building 2 was not included in the 1996 report.

Paradigm reviewed the **1989 Survey of the County Buildings** report provided by Monroe County and noted the following:

The 1989 Survey of the County Buildings Report was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 2. The 1989 survey included sampling and analysis of pipe insulation only.

# SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 2 LODGE ROCHESTER, NEW YORK

### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the Iola Campus, Building 2, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations.

## SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 2 LODGE ROCHESTER, NEW YORK

### INTRODUCTION

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 2, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s, inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 2, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method

198.1 ("Polarized Light Microscopy Methods for identifying

and quantitating asbestos in bulk samples").

## SECTION I INTRODUCTION

# IOLA CAMPUS BUILDING 2 LODGE ROCHESTER, NEW YORK

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## BUILDING #2 LODGE

### <u>PARADIGM</u>

Environmental Services, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

### T.E.M. Results

Client: Location: **County of Monroe** 

Iola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

Job No: 77303

Sample Date: 11/24/97 Page Number: 2 of 2

				TEM Analysis		
Client ID	Lab ID	Sampling Location	Description	Total Asbestos	Asbestos Type	
Roof-A.1a	87940	Roof	Black Fibrous Roofing	<1.0%	None Detected	
Roof-A.1b	87941	Roof	Black with Grey Stones Fibrous Roofing	<1.0%	None Detected	
Flashing - A.1a	87943	Roof	Black Fibrous Roof Flashing	<1.0%	None Detected	
Flashing - A.1b	87944	Roof	Black Fibrous Roof Flashing	<1.0%	None Detected	
J						

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

**Laboratory Results Approved By:** 

### **PARADIGM**

## Environmental Services, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

### T.E.M. Results

Client: Location: **County of Monroe** 

lola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

Job No: 77303 Sample Date: 11/24/97

Page Number: 1 of 2

Client ID	Lab ID			TEM A	\nalysis
		Sampling Location	Description	Total Asbestos	Asbestos Type
FT-A.1	84738	Basement, Room 5, Northwest Corner	Tan 12"x12" Floor Tile	2.80%	Chrysotile
FTM-A.1	84739	Basement, Room 5, Northwest Corner	Black Fibrous Floor Tile Mastic from Sample 84738	<1.0%	Trace Chrysotile
CMF-A.1	84742	Basement, Room 07 OMH Conference Room	Yellow Carpet Mastic on Floor	<1.0%	None Detected
CMM-A.1	84743	Basement, Room 07 OMH Conference Room	Tan Cove Molding Mastic	<1.0%	None Detected
SV-B.1	84744	Third Floor, Break Room	White Sheet Vinyl	<1.0%	None Detected
SVM-B.1	84745	Third Floor, Break Room	Tan Sheet Vinyl Mastic from Sample 84745	<1.0%	None Detected
SV-A.1	84746	Second Floor, Room 204-A	Grey Sheet Vinyl	<1.0%	None Detected
SVM-A.1	84747	Second Floor, Room 204-A	Yellow Sheet Vinyl Mastic from Sample 84746	<1.0%	None Detected
FT-D.1	87067	Room 300	Green 9"x9" Floor Tile	<1.0%	None Detected
FTM-D.1	87068		Brown Floor Tile Mastic from <b>Sample</b> 87067	<1.0%	None Detected

ELAP ID No.: 10920

The samples were analyzed by Transmission Electron Microscopy, according to the State of New York DOH ELAP Method 198.1 and 198.4.

N/A - Not Applicable

TEM ANALYSIS ONLY PERFORMED BY AMA ANALYTICAL SERVICES, INC.

Date Analyzed:

12/4/97, 12/10/97

Analyst:

Andreas Saldivar, Luis Bustillos

Laboratory Results Approved By:

### PARADIGM Environmental

rvices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

**Sample Date:** 11/24/97

Job Number: 77303 Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
				reicentage		141	· or oorning	
PI-A.1	84734	Basement, Room 07	Yellow Fibrous Pipe Insulation	None Detected	0%		Mineral Wool 100%	0%
PI-B.1	84735	Basement, Hallway Adjacent to Women's Rest Room	White Fibrous Pipe Insulation	Chrysotile 40%	40%		Cellulose 18%	42%
PI-C.1	84736	Basement, Hallway Adjacent to Women's Rest Room	Grey Fibrous Pipe Insulation	Chrysotile 18%	18%		Cellulose 55%	27%
SCT-A.1	84737	Basement, Room 07 OMH Conference Room	White Fibrous 2'x4' Suspended Ceiling Tile	None Detected	0%		Cellulose 18% Mineral Wool 60%	22%
FT-A.1	84738	Basement, Room 5, Northwest Corner	Tan 12"x12" Floor Tile	None Detected	0%	*	None Detected	100%
TM-A.1	84739	Basement, Room 5, Northwest Corner	Black Fibrous Floor Tile Mastic from <b>Sample 84738</b>	None Detected	0%	*	Cellulose 15%	85%
WS-A.1	84740	Basement, Auditorium, Room 4	White Fibrous Wall System, Drywall & Spackle	None Detected	0%		Cellulose 15%	85%
DW-A.1	84741	Basement, Room 06, Break Room	White Fibrous Drywall	None Detected	0%		Cellulose 29%	71%
CMF-A.1	84742	Basement, Room 07 OMH Conference Room	Yellow Carpet Mastic on Floor	None Detected	0%	*	None Detected	100%
CMM-A.1	84743	Basement, Room 07 OMH Conference Room	Tan Cove Molding Mastic	None Detected	0%	*	None Detected	100%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 11/25/97

Microscope: Olympus BH-2 #235757 alyst: Patrick Fitzgerald

Laboratory Results Approved By:

### <u>PARADIGM</u>

## Environmental ervices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

Location: Iola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/24/97

Job Number: 77302 Page Number: 1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
SCT-B.1	84730	Center	White Fibrous 2'x4' Suspended Ceiling Tile	None Detected	0%		Cellulose 62% Mineral Wool 20%	18%
P-A.1	84733	First Floor, Room 117 Column	White Plaster	None Detected	0%		None Detected	100%
· · · · · · · · · · · · · · · · · · ·							***************************************	

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

Date Analyzed: 11/25/97

Microscope: Olympus BH-2 #235757

alyst: Mary Dohr

Laboratory Results Approved By: <u>...</u>

### **PARADIGM**

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

rvices, Inc.

Job Number:

Client: County of Monroe

77304

Location: Iola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

Sample Date:

11/24/97

Page Number:

1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
SV-B.1	84744	Third Floor, Break Room	White Sheet Vinyl	None Detected	0%	*	None Detected	100%
SVM-B.1	84745	Third Floor, Break Room	Tan Sheet Vinyl Mastic from Sample 84745	None Detected	0%	*	Cellulose 8%	92%
!								
	-							

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

11/25/97

Microscope:

Olympus BH-2 #235757

^ alyst:

Mary Dohr

**Laboratory Results Approved By:** 

### PARADIGM Environmental

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

≥rvices, Inc.

Job Number:

Client: County of Monroe

Location: Iola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

Sample Date: 11/24/97

Page Number: 1 Of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Fibers Type & Percentage	Matrix Material %
SV-A.1	84746	Second Floor, Room 204-A	Grey Sheet Vinyl	None Detected	0%	*	None Detected	100%
SVM-A.1	84747	Second Floor, Room 204-A	Yellow Sheet Vinyl Mastic from Sample 84746	None Detected	0%	*	None Detected	100%
FT-C.1	84748	Second Floor, Hallway	Brown Fibrous 9"x9" Floor Tile	Chrysotile 23%	23%		None Detected	77%
FTM-C.1	84749	Second Floor, Hallway	Black Floor Tile Mastic from <b>Sample 84748</b>	None Detected	0%	*	Cellulose 6%	94%
:					.,			

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine

if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 11/25/97

Microscope: Olympus BH-2 #235757

alyst: Mary Dohr

**Laboratory Results Approved By:** 

## **PARADIGM**

### **Environmental**

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

ervices, Inc.

Client:

**County of Monroe** 

Location:

Iola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/1/97

Job Number: 77489

Page Number:

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Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
FT-D.1	87067	Room 300	Green 9"x9" Floor Tile	None Detected	0%	*	None Detected	100%
FTM-D.1	87068	Room 300	Brown Floor Tile Mastic from Sample 87067	None Detected	0%	*	None Detected	100%
	, , , , , , , , , , , , , , , , , , ,							

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/1/97

Microscope:

Olympus BH-2 #235757

1 `alyst:

Patrick Fitzgerald

Laboratory Results Approved By:

### **PARADIGM**

## Environmental ervices, Inc.

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client:

**County of Monroe** 

Location:

Job Number:

Iola Complex, Building 1, 350 East Henrietta Road, Rochester, New York

Sample Date:

12/2/97

77587

Page Number:

1 of 1

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
Roof-A.1a	87940	Roof	Black Fibrous Roofing	None Detected	0%	*	Cellulose 12% Fiberglass 45%	43%
Roof-A.1b	87941	Roof	Black with Grey Stones Fibrous Roofing	None Detected	0%	*	Cellulose 19% Fiberglass 38%	43%
Roof-A.1c	87942	Roof	White/Black Fibrous Insulation	None Detected	0%		Mineral Wool 44% Cellulose 18%	38%
Flashing - A.1a	87943	Roof	Black Fibrous Roof Flashing	None Detected	0%	*	Cellulose 20% Fiberglass 36%	44%
Flashing - A.1b	87944	Roof	Black Fibrous Roof Flashing	None Detected	0%	*	Cellulose 33% Fiberglass 4%	67%
į								

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

\*Polarized Light Microscopy is not consistently reliable in detecting asbestos in non-friable organically bound materials.

Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed:

12/3/97

Microscope:

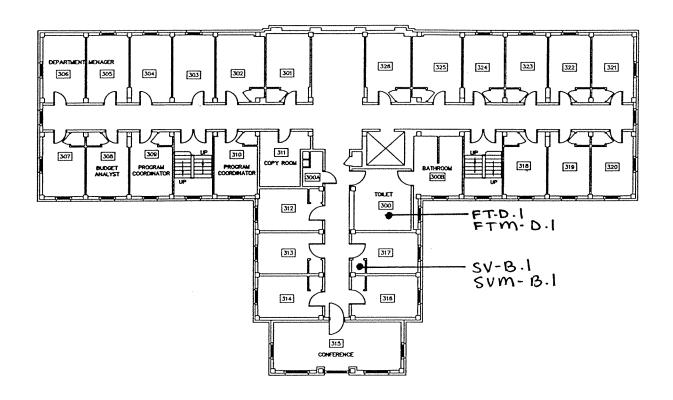
Olympus BH-2 #235757

^ ¬alyst:

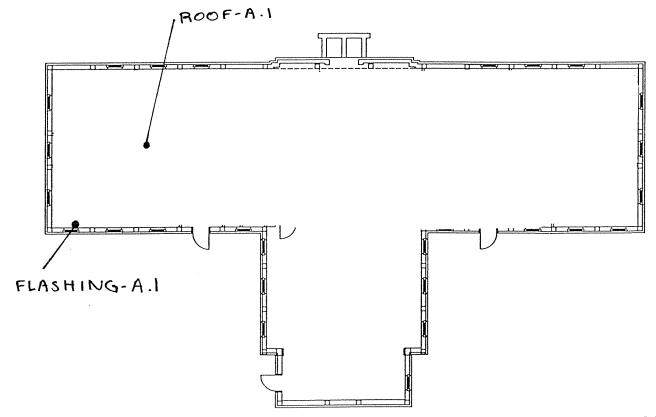
Patrick Fitzgerald

Laboratory Results Approved By:

## SECTION V LABORATORY REPORTS

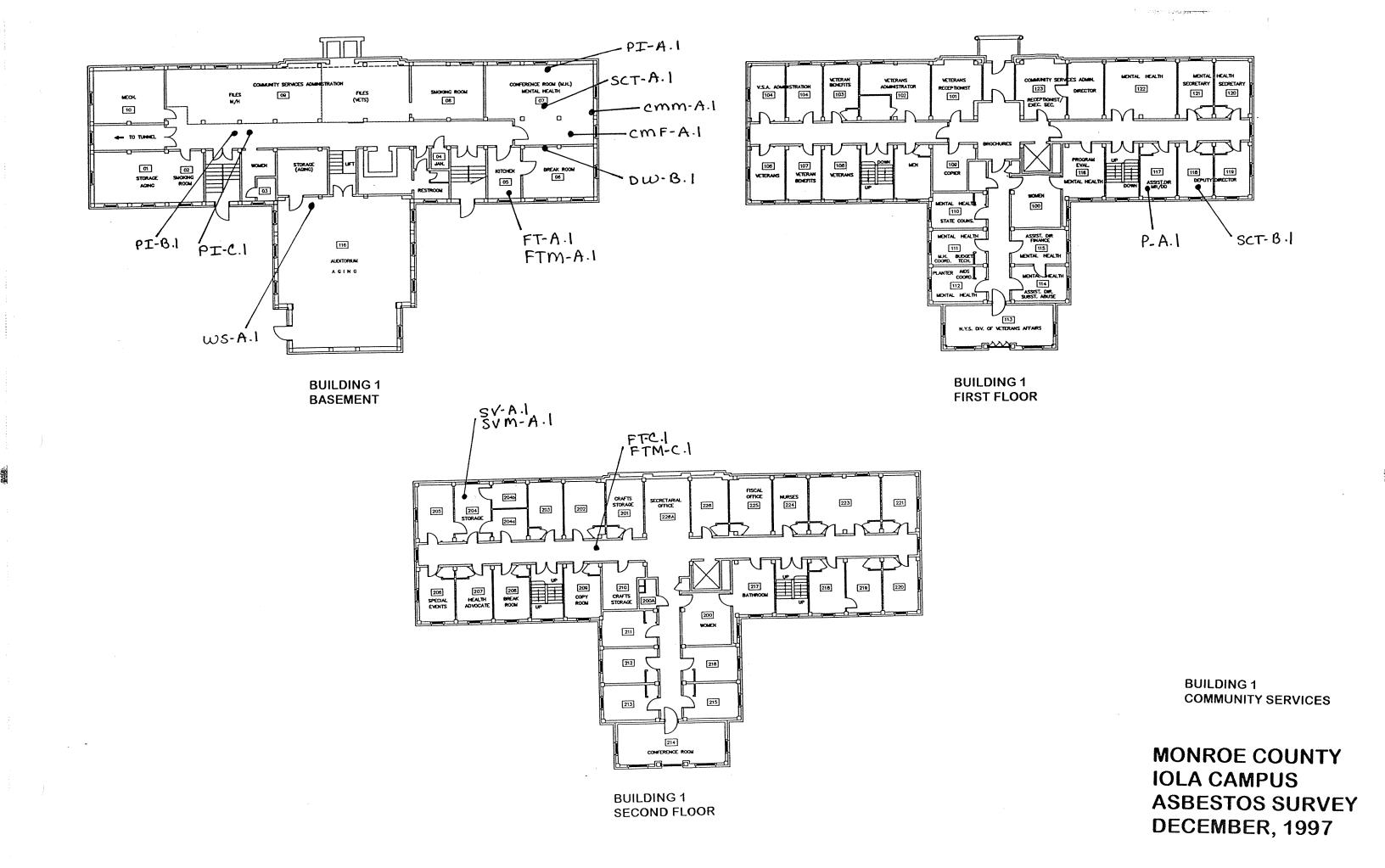


BUILDING 1 THIRD FLOOR



BUILDING 1 ROOF BUILDING 1
COMMUNITY SERVICES

MONROE COUNTY IOLA CAMPUS ASBESTOS SURVEY DECEMBER, 1997



# SECTION IV DRAWINGS

### **ELEVATOR/STAIRWELLS**

Elevator Brown 9"x 9" Floor Tile & Mastic	30	square feet						
East Stairwell White Pipe Insulation	20	linear feet						
West Stairwell White Pipe Insulation	20	linear feet						
Total Asbestos Containing Materials found in the Elevator/Stairwells:								
Brown 9" x 9" Floor Tile & Mastic:	30	square feet						
White Pipe Insulation:	40	linear feet						

Paradigm certifies that this report is based on Paradigm's observations and believes it to be an accurate representation of the conditions as they existed on November 24 - December 4, 1997.

<sup>\*</sup>All quantities are approximations.

### **3RD FLOOR CONTINUED**

Space 325 Brown 9" x 9" Floor Tile & Mastic

150

square feet

Total Asbestos Containing Materials on the 3rd Floor:

Brown 9" x 9" Floor Tile & Mastic:

3,150

square feet

### 3RD FLOOR

Space 301 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 302, 303, & 304 Brown 9" x 9" Floor Tile & Mastic	450	square feet
Space 305 & 306 Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 307 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 308 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 309 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 310 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 312 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 313 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 314 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 318 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 319 & 320 Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 321 & 322 Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 323 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 324 Brown 9" x 9" Floor Tile & Mastic	150	square feet

### **2ND FLOOR CONTINUED**

Brown 9" x 9" Floor Tile & Mastic	5,190	square feet
Total Asbestos Containing Materials on the 2nd Floor:		
South Corridor Brown 9" x 9" Floor Tile & Mastic	240	square feet
East/West Corridor (Including Secretary's Office) Brown 9" x 9" Floor Tile & Mastic	1,200	square feet
Space 226A (Secretary's Office) Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 226 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 225 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 224 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 223 Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 221 Brown 9" x 9" Floor Tile & Mastic	150	square feet

### 2ND FLOOR

Space 201 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 202 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 203 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 205 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 206 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 207 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 208 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 209 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 210 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 211 & 212 Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 213 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 215 & 216 Brown 9"x 9" Floor Tile & Mastic	300	square feet
Space 217 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 218 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 219 & 220 Brown 9" x 9" Floor Tile & Mastic	150	square feet

### 1ST FLOOR CONTINUED

**Total Asbestos Containing Materials on the 1st Floor:** 

Brown 9" x 9" Floor Tile & Mastic

3,430

square feet

### **1ST FLOOR**

Space 101 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 102 & 102-A Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 103 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 104 & 105 Brown 9" x 9" Floor Tile & Mastic	300	square feet
Space 106, 107, & 108 Brown 9" x 9" Floor Tile & Mastic	450	square feet
Space 109 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 110 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 111 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 112 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 114 Brown 9" x 9" Floor Tile & Mastic	150	square feet
Space 115 Brown 9" x 9" Floor Tile & Mastic	150	square feet
<u>Lobby*</u> Brown 9" x 9" Floor Tile & Mastic	540	square feet
West Corridor Brown 9" x 9" Floor Tile & Mastic	400	square feet
South Corridor Brown 9" x 9" Floor Tile & Mastic	240	square feet

<sup>\*</sup>The brown floor tile and mastic is layered with white floor tile and mastic in the Lobby. The brown floor tile was found to be asbestos containing; therefore, the white floor tile and mastic was not analyzed as these floor tiles must be removed simultaneously.

### **BASEMENT**

Space 02 White Pipe Insulation	150	linear feet
Space 04 (Auditorium) White Pipe Insulation Grey Pipe Insulation	80 45	linear feet linear feet
Space 05 Tan 12" x 12" Floor Tile & Mastic White Pipe Insulation Grey Pipe Insulation	160 20 40	square feet linear feet linear feet
Space 06 White Pipe Insulation	50	linear feet
Space 07 White Pipe Insulation Grey Pipe Insulation	40 30	linear feet linear feet
Space 08 White Pipe Insulation	30	linear feet
Space 09 White Pipe Insulation	80	linear feet
Corridor White Pipe Insulation Grey Pipe Insulation	160 160	linear feet linear feet
Janitor's Closet White Pipe Insulation	15	linear feet
Restroom White Pipe Insulation	30	linear feet
Women's Room White Pipe Insulation	25	linear feet
Total Asbestos Containing Materials in the Basement:		
Tan 12" x 12" Floor Tile & Mastic: White Pipe Insulation: Grey Pipe Insulation:	160 680 275	square feet linear feet linear feet

### Total square/linear footage of asbestos containing materials

Floor Tile and Mastic: 11,960 square feet

Pipe Insulation: 995 linear feet

### Total cost estimate for asbestos abatement

Floor Tile and Mastic: \$27,000

Pipe Insulation: \$15,000

The following pages summarize the materials that were found to be asbestos containing in Building 1.

# IOLA CAMPUS BUILDING 1 COMMUNITY SERVICES ROCHESTER, NEW YORK

### **CONCLUSIONS**

An asbestos survey was conducted by Paradigm Environmental Services, Inc. at the Iola Campus, Building 1, Rochester, New York on November 24 - December 4, 1997. The purpose of the survey was to identify the approximate locations and quantities of asbestos containing materials.

A walkthrough of the building was conducted by Paradigm inspectors, and a suspect list of materials that may contain asbestos was compiled from observations, notes, and drawings. Sample locations and custody information were recorded and the samples were transported to the Paradigm laboratory for analysis.

For reporting, classification, and handling, the following rules were applied: Individual layers of aggregate materials containing one or more layers (such as floor tile and mastic) are analyzed as separate samples. However, if one layer is determined positive for asbestos, all subsequent layers are classified as ACM due to the necessity of handling all layers as a single system during removal activities or other disturbances. Friable materials classified as ACM when confirmed positive by polarized light microscopy (PLM). Non-friable organically bound materials (NOB) are classified ACM when confirmed positive by PLM. NOB materials are classified as non-asbestos containing materials when tested negative by PLM and confirmed negative by subsequent transmission electron microscopy (TEM) analysis. In the absence of confirmatory TEM testing, NOB materials must be classified and handled as asbestos containing.

Paradigm reviewed the 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey provided by Monroe County and noted the following:

The 1996 Labeling of Asbestos Insulation and Update of the 1989 Asbestos Survey Report refers to the Steam Tunnels, Power House, and Building 5 only.

Paradigm cannot compare the 1996 Asbestos Survey to this survey due to the fact that Building 1 was not included in the 1996 report.

Paradigm reviewed the 1989 Survey of the County Buildings Report provided by Monroe County and noted the following:

The 1989 Survey of the County Buildings Report was incomplete in regard to the number of types of materials tested in the interior and exterior of Building 1. The 1989 survey included sampling and analysis of pipe insulation and ceiling tiles only. This survey includes sampling and analysis of additional possible asbestos containing material types. Of those materials sampled, Paradigm noted asbestos containing pipe insulation as stated on the 1989 report; however, the following additional materials are to be classified as ACM per the 1997 survey:

Floor Tile and Mastic

# SECTION III CONCLUSIONS

# IOLA CAMPUS BUILDING 1 COMMUNITY SERVICES ROCHESTER, NEW YORK

### **LIMITATIONS**

The information provided in this report was compiled from field and laboratory data and was prepared for reference to the lola Campus, Building 1, Rochester, New York.

Observations noted and recorded are intended to represent the conditions that existed at the subject site at the time and date that the observations were made.

Determinations of suspect asbestos containing materials within the building was subject to the accessibility of individual areas or spaces. Paradigm Environmental Services, Inc. accepts no responsibility for the content of building materials within areas or spaces that were unknown to us or not reasonably accessible.

Conclusions and recommendations provided in this report are based on the assumption that materials identified are homogeneous throughout their application.

Paradigm assumes no liability for any buildings not identified by the client that may fall under state or federal regulations.

## SECTION II LIMITATIONS

# IOLA CAMPUS BUILDING 1 COMMUNITY SERVICES ROCHESTER, NEW YORK

### INTRODUCTION

Paradigm Environmental Services, Inc. was retained by the County of Monroe on November 24-December 4, 1997 to conduct an inspection for the detection of asbestos containing materials located the Iola Campus, Building 1, 350 East Henrietta Road, Rochester, New York.

Paradigm Environmental Services Inc.'s inspectors Paul Mahoney, inspector #AH 88-10022, Richard Merlau, inspector #AH-92-00699, and Shawn House, inspector #88-06583, conducted this inspection with procedures and guidelines commonly used and accepted in New York State. The objective of this inspection was to identify approximate locations and quantities of asbestos containing materials located within the Iola Campus, Building 1, Rochester, New York.

An initial walkthrough of the area requiring inspection was conducted by experienced inspectors who observed and recorded many of the materials used in the construction of the building. The inspector proceeded by assessing floor, wall, ceiling materials, surfacing materials, thermal systems insulation, roofing materials and miscellaneous materials. The inspection was organized and approached systematically to observe, record, and prepare a list of building materials that are suspected to contain asbestos.

The inspectors selected materials for inclusion in this report through an understanding of the historical uses of asbestos and the experience of the Paradigm staff. Generally, if a building material within a structure could contain asbestos, the material was included in the survey.

Samples were collected from locations within each homogeneous sampling area. Samples consist of a small amount of the subject material. Sampling points were recorded and cross referenced to prepared sketches. Individual samples were also recorded on a chain of custody document.

Samples were individually preserved within a container and transported to the Paradigm analytical laboratory for asbestos analysis.

The Paradigm laboratory is accredited through NYSDOH/ELAP (Lab ID# 10958) for Solid and Hazardous Waste and Air and Emissions for Bulk Asbestos Fiber Analysis. The chain of custody record accompanies all samples from the point collected until they reach the laboratory. Samples are stored at the laboratory for 90 days then disposed of according to authoritative regulations.

The analysis methodology used is as follows:

Asbestos Bulk Samples - New York State Department of Health, ELAP Method

198.1 ("Polarized Light Microscopy Methods for identifying

and quantitating asbestos in bulk samples").

# SECTION I INTRODUCTION

# IOLA CAMPUS BUILDING 1 COMMUNITY SERVICES ROCHESTER, NEW YORK

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- DRAWINGS

SECTION V

- LABORATORY REPORTS

## BUILDING #1 COMMUNITY SERVICES

### COUNTY OF MONROE 350 EAST HENRIETTA ROAD ROCHESTER, NEW YORK 14620

### **ASBESTOS SURVEY**

AΤ

IOLA CAMPUS
BUILDINGS 1, 2, 4, 5, 7, 8, 9, 10
TUNNELS A, B, C, D, & E
350 EAST HENRIETTA ROAD
ROCHESTER, NEW YORK

NOVEMBER 24 - DECEMBER 4, 1997

Prepared By

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 LAKE AVENUE, ROCHESTER, NEW YORK (716) 647-2530

### PARADIGM Environmental Prvices, Inc.

Job Number:

179 Lake Avenue Rochester, New York 716-647-2530 FAX 716-647-3311

Client: County of Monroe

77320

Location: Iola Complex, Tunnels, 350 East Henrietta Road, Rochester, New York Sample Date:

Page Number: 1 of 2

11/24/97

Client ID	Lab ID	Sampling Location	Description	Asbestos	Total	ĪΤ	Non-Asbestos	Matrix
			· ·	Fibers Type &	Asbestos	E	Fibers Type &	Material
				Percentage		М	Percentage	%
PI-A.1	84867	Tunnel A	White Fibrous Pipe Insulation	Chrysotile 36%	36%		None Detected	64%
MJP-A.1	84868	Tunnel A	White Fibrous Mud Joint Packing	Chrysotile 32%	32%		None Detected	68%
PI-A.1	84869	Tunnel B	White Fibrous Pipe Insulation	Chrysotile 42% Amosite 6%	48%		None Detected	52%
MJP-A.1	84870	Tunnel B	White Fibrous Mud Joint Packing	Chrysotile 39%	39%		Mineral Wool 28%	33%
PI-A.1	84871	Tunnel C	White Fibrous Pipe Insulation	Chrysotile 34%	34%		None Detected	66%
PI-B.1	84872	Tunnel C	White/Grey Fibrous Pipe Insulation	Chrysotile 43%	43%		Cellulose 48%	9%
PI-A.1	84873	Tunnel D	White Fibrous Pipe Insulation	Chrysotile 62%	62%		None Detected	38%
MJP-A.1	84874	Tunnel D	White Fibrous Mud Joint Packing	Chrysotile 43%	43%		None Detected	57%
PI-A.1	84875	Tunnel E	White Fibrous Pipe Insulation	Chrysotile 41%	41%		None Detected	59%
PI-B.1	84876	Tunnel E	Yellow Fibrous Pipe Insulation	None Detected	0%		Fiberglass 10% Mineral Wool 80% Cellulose 6%	4%

ELAP ID No.: 10958

The samples were analyzed by Polarized Light Microscopy, according to the State of New York DOH ELAP Method 198.1 ("Polarized-Light Microscope Methods for Identifying and Quantitating Asbestos in Bulk Samples").

Date Analyzed:

11/25/97

Microscope:

Olympus BH-2 #235757

Analyst:

Mary Dohr

Laboratory Results Approved By:

File ID: lolatunn.xls